

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To provide a complete substitute.

**IN THE SENATE OF THE UNITED STATES—110th Cong., 1st Sess.**

**S. 2191**

To direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes.

Referred to the Committee on \_\_\_\_\_  
and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended  
to be proposed by Mr. CRAIG

Viz:

1 Strike all after the enacting clause and insert the fol-  
2 lowing:

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Renewable Fuels, Consumer Protection, and Energy Ef-  
6 ficiency Act of 2007”.

7 (b) TABLE OF CONTENTS.—The table of contents of  
8 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Relationship to other law.

## 2

TITLE I—BIOFUELS FOR ENERGY SECURITY AND  
TRANSPORTATION

- Sec. 101. Short title.
- Sec. 102. Definitions.

## Subtitle A—Renewable Fuel Standard

- Sec. 111. Renewable fuel standard.
- Sec. 112. Production of renewable fuel using renewable energy.
- Sec. 113. Sense of Congress relating to the use of renewable resources to generate energy.

## Subtitle B—Renewable Fuels Infrastructure

- Sec. 121. Infrastructure pilot program for renewable fuels.
- Sec. 122. Bioenergy research and development.
- Sec. 123. Bioresearch centers for systems biology program.
- Sec. 124. Loan guarantees for renewable fuel facilities.
- Sec. 125. Grants for renewable fuel production research and development in certain States.
- Sec. 126. Grants for infrastructure for transportation of biomass to local biorefineries.
- Sec. 127. Biorefinery information center.
- Sec. 128. Alternative fuel database and materials.
- Sec. 129. Fuel tank cap labeling requirement.
- Sec. 130. Biodiesel.
- Sec. 131. Transitional assistance for farmers who plant dedicated energy crops for a local cellulosic refinery.
- Sec. 132. Research and development in support of low-carbon fuels.

## Subtitle C—Studies

- Sec. 141. Study of advanced biofuels technologies.
- Sec. 142. Study of increased consumption of ethanol-blended gasoline with higher levels of ethanol.
- Sec. 143. Pipeline feasibility study.
- Sec. 144. Study of optimization of flexible fueled vehicles to use E-85 fuel.
- Sec. 145. Study of credits for use of renewable electricity in electric vehicles.
- Sec. 146. Study of engine durability associated with the use of biodiesel.
- Sec. 147. Study of incentives for renewable fuels.
- Sec. 148. Study of streamlined lifecycle analysis tools for the evaluation of renewable carbon content of biofuels.
- Sec. 149. Study of effects of ethanol-blended gasoline on off-road vehicles.
- Sec. 150. Study of offshore wind resources.

## Subtitle D—Environmental Safeguards

- Sec. 161. Grants for production of advanced biofuels.
- Sec. 162. Studies of effects of renewable fuel use.
- Sec. 163. Integrated consideration of water quality in determinations on fuels and fuel additives.
- Sec. 164. Anti-backsliding.

## TITLE II—ENERGY EFFICIENCY PROMOTION

- Sec. 201. Short title.
- Sec. 202. Definition of Secretary.

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## Subtitle A—Promoting Advanced Lighting Technologies

- Sec. 211. Accelerated procurement of energy efficient lighting.
- Sec. 212. Incandescent reflector lamp efficiency standards.
- Sec. 213. Bright Tomorrow Lighting Prizes.
- Sec. 214. Sense of Senate concerning efficient lighting standards.
- Sec. 215. Renewable energy construction grants.

## Subtitle B—Expediting New Energy Efficiency Standards

- Sec. 221. Definition of energy conservation standard.
- Sec. 222. Regional efficiency standards for heating and cooling products.
- Sec. 223. Furnace fan rulemaking.
- Sec. 224. Expedited rulemakings.
- Sec. 225. Periodic reviews.
- Sec. 226. Energy efficiency labeling for consumer electronic products.
- Sec. 227. Residential boiler efficiency standards.
- Sec. 228. Technical corrections.
- Sec. 229. Electric motor efficiency standards.
- Sec. 230. Energy standards for home appliances.
- Sec. 231. Improved energy efficiency for appliances and buildings in cold climates.
- Sec. 232. Deployment of new technologies for high-efficiency consumer products.
- Sec. 233. Industrial efficiency program.

## Subtitle C—Promoting High Efficiency Vehicles, Advanced Batteries, and Energy Storage

- Sec. 241. Lightweight materials research and development.
- Sec. 242. Loan guarantees for fuel-efficient automobile parts manufacturers.
- Sec. 243. Advanced technology vehicles manufacturing incentive program.
- Sec. 244. Energy storage competitiveness.
- Sec. 245. Advanced transportation technology program.
- Sec. 246. Inclusion of electric drive in Energy Policy Act of 1992.
- Sec. 247. Commercial insulation demonstration program.

## Subtitle D—Setting Energy Efficiency Goals

- Sec. 251. Oil savings plan and requirements.
- Sec. 252. National energy efficiency improvement goals.
- Sec. 253. National media campaign.
- Sec. 254. Modernization of electricity grid system.
- Sec. 255. Smart grid system report.
- Sec. 256. Smart grid technology research, development, and demonstration.
- Sec. 257. Smart grid interoperability framework.
- Sec. 258. State consideration of smart grid.
- Sec. 259. Support for energy independence of the United States.
- Sec. 260. Energy Policy Commission.

## Subtitle E—Promoting Federal Leadership in Energy Efficiency and Renewable Energy

- Sec. 261. Federal fleet conservation requirements.
- Sec. 262. Federal requirement to purchase electricity generated by renewable energy.
- Sec. 263. Energy savings performance contracts.

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- Sec. 264. Energy management requirements for Federal buildings.
- Sec. 265. Combined heat and power and district energy installations at Federal sites.
- Sec. 266. Federal building energy efficiency performance standards.
- Sec. 267. Application of International Energy Conservation Code to public and assisted housing.
- Sec. 268. Energy efficient commercial buildings initiative.
- Sec. 269. Clean energy corridors.
- Sec. 270. Federal standby power standard.
- Sec. 270A. Standard relating to solar hot water heaters.
- Sec. 270B. Renewable energy innovation manufacturing partnership.
- Sec. 270C. Express loans for renewable energy and energy efficiency.
- Sec. 270D. Small business energy efficiency.

## Subtitle F—Assisting State and Local Governments in Energy Efficiency

- Sec. 271. Weatherization assistance for low-income persons.
- Sec. 272. State energy conservation plans.
- Sec. 273. Utility energy efficiency programs.
- Sec. 274. Energy efficiency and demand response program assistance.
- Sec. 275. Energy and environmental block grant.
- Sec. 276. Energy sustainability and efficiency grants for institutions of higher education.
- Sec. 277. Energy efficiency and renewable energy worker training program.
- Sec. 278. Assistance to States to reduce school bus idling.
- Sec. 279. Definition of State.
- Sec. 280. Coordination of planned refinery outages.
- Sec. 281. Technical criteria for clean coal power initiative.
- Sec. 282. Administration.
- Sec. 283. Offshore renewable energy.

## Subtitle G—Marine and Hydrokinetic Renewable Energy Promotion

- Sec. 291. Definition of marine and hydrokinetic renewable energy.
- Sec. 292. Research and development.
- Sec. 293. National ocean energy research centers.

TITLE III—CARBON CAPTURE AND STORAGE RESEARCH,  
DEVELOPMENT, AND DEMONSTRATION

- Sec. 301. Short title.
- Sec. 302. Carbon capture and storage research, development, and demonstration program.
- Sec. 303. Carbon dioxide storage capacity assessment.
- Sec. 304. Carbon capture and storage initiative.
- Sec. 305. Capitol power plant carbon dioxide emissions demonstration program.
- Sec. 306. Assessment of carbon sequestration and methane and nitrous oxide emissions from terrestrial ecosystems.
- Sec. 307. Abrupt climate change research program.

TITLE IV—COST-EFFECTIVE AND ENVIRONMENTALLY  
SUSTAINABLE PUBLIC BUILDINGS

## Subtitle A—Public Buildings Cost Reduction

- Sec. 401. Short title.

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- Sec. 402. Cost-effective and geothermal heat pump technology acceleration program.
- Sec. 403. Environmental Protection Agency demonstration grant program for local governments.
- Sec. 404. Definitions.

Subtitle B—Installation of Photovoltaic System at Department of Energy  
Headquarters Building

- Sec. 411. Installation of photovoltaic system at Department of Energy headquarters building.

Subtitle C—High-Performance Green Buildings

- Sec. 421. Short title.
- Sec. 422. Findings and purposes.
- Sec. 423. Definitions.

PART I—OFFICE OF HIGH-PERFORMANCE GREEN BUILDINGS

- Sec. 431. Oversight.
- Sec. 432. Office of High-Performance Green Buildings.
- Sec. 433. Green Building Advisory Committee.
- Sec. 434. Public outreach.
- Sec. 435. Research and development.
- Sec. 436. Budget and life-cycle costing and contracting.
- Sec. 437. Authorization of appropriations.

PART II—HEALTHY HIGH-PERFORMANCE SCHOOLS

- Sec. 441. Definition of high-performance school.
- Sec. 442. Grants for healthy school environments.
- Sec. 443. Model guidelines for siting of school facilities.
- Sec. 444. Public outreach.
- Sec. 445. Environmental health program.
- Sec. 446. Authorization of appropriations.

PART III—STRENGTHENING FEDERAL LEADERSHIP

- Sec. 451. Incentives.
- Sec. 452. Federal procurement.
- Sec. 453. Federal green building performance.
- Sec. 454. Storm water runoff requirements for Federal development projects.

PART IV—DEMONSTRATION PROJECT

- Sec. 461. Coordination of goals.
- Sec. 462. Authorization of appropriations.

TITLE V—CORPORATE AVERAGE FUEL ECONOMY STANDARDS

- Sec. 501. Short title.
- Sec. 502. Average fuel economy standards for automobiles and certain other vehicles.
- Sec. 503. Amending Fuel Economy Standards.
- Sec. 504. Definitions.
- Sec. 505. Ensuring safety of automobiles.
- Sec. 506. Credit Trading Program.

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- Sec. 507. Labels for fuel economy and greenhouse gas emissions.
- Sec. 508. Continued applicability of existing standards.
- Sec. 509. National Academy of Sciences Studies.
- Sec. 510. Standards for Executive agency automobiles.
- Sec. 511. Increasing Consumer Awareness of Flexible Fuel Automobiles.
- Sec. 512. Periodic review of accuracy of fuel economy labeling procedures.
- Sec. 513. Tire fuel efficiency consumer information.
- Sec. 514. Advanced Battery Initiative.
- Sec. 515. Biodiesel standards.
- Sec. 516. Use of Civil Penalties for research and development.
- Sec. 517. Energy Security Fund and Alternative Fuel Grant Program.
- Sec. 518. Authorization of appropriations.
- Sec. 519. Application with Clean Air Act.
- Sec. 520. Alternative fuel vehicle action plan.
- Sec. 521. Study of the adequacy of transportation of domestically-produced renewable fuel by railroads and other modes of transportation.

## TITLE VI—ENERGY DIPLOMACY AND SECURITY

- Sec. 601. Short title.
- Sec. 602. Definitions.
- Sec. 603. Sense of Congress on energy diplomacy and security.
- Sec. 604. Strategic energy partnerships.
- Sec. 605. International energy crisis response mechanisms.
- Sec. 606. Hemisphere energy cooperation forum.
- Sec. 607. National Security Council reorganization.
- Sec. 608. Annual national energy security strategy report.
- Sec. 609. Appropriate congressional committees defined.
- Sec. 610. Convention on Supplementary Compensation for Nuclear Damage contingent cost allocation.

## TITLE VII—MISCELLANEOUS

- Sec. 701. Study of the effect of private wire laws on the development of combined heat and power facilities.

1 **SEC. 2. RELATIONSHIP TO OTHER LAW.**

2       Except to the extent expressly provided in this Act  
3 or an amendment made by this Act, nothing in this Act  
4 or an amendment made by this Act supersedes, limits the  
5 authority provided or responsibility conferred by, or au-  
6 thorizes any violation of any provision of law (including  
7 a regulation), including any energy or environmental law  
8 or regulation.

1 **TITLE I—BIOFUELS FOR ENERGY**  
2 **SECURITY AND TRANSPOR-**  
3 **TATION**

4 **SEC. 101. SHORT TITLE.**

5 This title may be cited as the “Biofuels for Energy  
6 Security and Transportation Act of 2007”.

7 **SEC. 102. DEFINITIONS.**

8 In this title:

9 (1) **ADVANCED BIOFUEL.**—

10 (A) **IN GENERAL.**—The term “advanced  
11 biofuel” means fuel derived from renewable bio-  
12 mass other than corn starch.

13 (B) **INCLUSIONS.**—The term “advanced  
14 biofuel” includes—

15 (i) ethanol derived from cellulose,  
16 hemicellulose, or lignin;

17 (ii) ethanol derived from sugar or  
18 starch, other than ethanol derived from  
19 corn starch;

20 (iii) ethanol derived from waste mate-  
21 rial, including crop residue, other vegeta-  
22 tive waste material, animal waste, and food  
23 waste and yard waste;

1 (iv) diesel-equivalent fuel derived from  
2 renewable biomass, including vegetable oil  
3 and animal fat;

4 (v) biogas (including landfill gas and  
5 sewage waste treatment gas) produced  
6 through the conversion of organic matter  
7 from renewable biomass;

8 (vi) butanol or other alcohols pro-  
9 duced through the conversion of organic  
10 matter from renewable biomass; and

11 (vii) other fuel derived from cellulosic  
12 biomass.

13 (2) CELLULOSIC BIOMASS ETHANOL.—The  
14 term “cellulosic biomass ethanol” means ethanol de-  
15 rived from any cellulose, hemicellulose, or lignin that  
16 is derived from renewable biomass.

17 (3) CONVENTIONAL BIOFUEL.—The term “con-  
18 ventional biofuel” means ethanol derived from corn  
19 starch.

20 (4) RENEWABLE BIOMASS.—The term “renew-  
21 able biomass” means—

22 (A) nonmerchantable materials or  
23 precommercial thinnings that—

24 (i) are byproducts of preventive treat-  
25 ments, such as trees, wood, brush,



1           thinnings, chips, and slash, that are  
2           removed—

3                       (I) to reduce hazardous fuels;

4                       (II) to reduce or contain disease  
5                       or insect infestation; or

6                       (III) to restore forest health;

7                       (ii) would not otherwise be used for  
8                       higher-value products; and

9                       (iii) are harvested from National For-  
10                      est System land or public land (as defined  
11                      in section 103 of the Federal Land Policy  
12                      and Management Act of 1976 (43 U.S.C.  
13                      1702))—

14                      (I) where permitted by law; and

15                      (II) in accordance with—

16                               (aa) applicable land manage-  
17                               ment plans; and

18                               (bb) the requirements for  
19                               old-growth maintenance, restora-  
20                               tion, and management direction  
21                               of paragraphs (2), (3), and (4) of  
22                               subsection (e) and the require-  
23                               ments for large-tree retention of  
24                               subsection (f) of section 102 of

1 the Healthy Forests Restoration  
2 Act of 2003 (16 U.S.C. 6512); or

3 (B) any organic matter that is available on  
4 a renewable or recurring basis from non-Fed-  
5 eral land or from land belonging to an Indian  
6 tribe, or an Indian individual, that is held in  
7 trust by the United States or subject to a re-  
8 striction against alienation imposed by the  
9 United States, including—

10 (i) renewable plant material,  
11 including—

12 (I) feed grains;

13 (II) other agricultural commod-  
14 ities;

15 (III) other plants and trees; and

16 (IV) algae; and

17 (ii) waste material, including—

18 (I) crop residue;

19 (II) other vegetative waste mate-  
20 rial (including wood waste and wood  
21 residues);

22 (III) animal waste and byprod-  
23 ucts (including fats, oils, greases, and  
24 manure); and

25 (IV) food waste and yard waste.

1 (5) RENEWABLE FUEL.—

2 (A) IN GENERAL.—The term “renewable  
3 fuel” means motor vehicle fuel or home heating  
4 fuel that is—

5 (i) produced from renewable biomass;

6 and

7 (ii) used to replace or reduce the  
8 quantity of fossil fuel present in a fuel or  
9 fuel mixture used to operate a motor vehi-  
10 cle or furnace.

11 (B) INCLUSION.—The term “renewable  
12 fuel” includes—

13 (i) conventional biofuel; and

14 (ii) advanced biofuel.

15 (6) SECRETARY.—The term “Secretary” means  
16 the Secretary of Energy

17 (7) SMALL REFINERY.—The term “small refin-  
18 ery” means a refinery for which the average aggre-  
19 gate daily crude oil throughput for a calendar year  
20 (as determined by dividing the aggregate throughput  
21 for the calendar year by the number of days in the  
22 calendar year) does not exceed 75,000 barrels.

## **Subtitle A—Renewable Fuel Standard**

### **SEC. 111. RENEWABLE FUEL STANDARD.**

#### **(a) RENEWABLE FUEL PROGRAM.—**

##### **(1) REGULATIONS.—**

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the President shall promulgate regulations to ensure that motor vehicle fuel and home heating oil sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains the applicable volume of renewable fuel determined in accordance with paragraph (2).

(B) PROVISIONS OF REGULATIONS.—Regardless of the date of promulgation, the regulations promulgated under subparagraph (A)—

(i) shall contain compliance provisions applicable to refineries, blenders, distributors, and importers, as appropriate, to ensure that—

(I) the requirements of this subsection are met; and

(II) renewable fuels produced from facilities that commence oper-

1           ations after the date of enactment of  
2           this Act achieve at least a 50 percent  
3           reduction in life cycle greenhouse gas  
4           emissions compared to gasoline; but  
5           (ii) shall not—

6                   (I) restrict geographic areas in  
7                   the contiguous United States in which  
8                   renewable fuel may be used; or

9                   (II) impose any per-gallon obliga-  
10                  tion for the use of renewable fuel.

11           (C) RELATIONSHIP TO OTHER REGULA-  
12           TIONS.—Regulations promulgated under this  
13           paragraph shall, to the maximum extent prac-  
14           ticable, incorporate the program structure, com-  
15           pliance, and reporting requirements established  
16           under the final regulations promulgated to im-  
17           plement the renewable fuel program established  
18           by the amendment made by section 1501(a)(2)  
19           of the Energy Policy Act of 2005 (Public Law  
20           109–58; 119 Stat. 1067).

21           (2) APPLICABLE VOLUME.—

22                   (A) CALENDAR YEARS 2008 THROUGH  
23                   2022.—

24                   (i) RENEWABLE FUEL.—For the pur-  
25                   pose of paragraph (1), subject to clause

1 (ii), the applicable volume for any of cal-  
 2 endar years 2008 through 2022 shall be  
 3 determined in accordance with the fol-  
 4 lowing table:

<b><i>Calendar year:</i></b>	<b><i>Applicable volume of renewable fuel (in billions of gallons):</i></b>
2008 .....	8.5
2009 .....	10.5
2010 .....	12.0
2011 .....	12.6
2012 .....	13.2
2013 .....	13.8
2014 .....	14.4
2015 .....	15.0
2016 .....	18.0
2017 .....	21.0
2018 .....	24.0
2019 .....	27.0
2020 .....	30.0
2021 .....	33.0
2022 .....	36.0.

5 (ii) ADVANCED BIOFUELS.—For the  
 6 purpose of paragraph (1), of the volume of  
 7 renewable fuel required under clause (i),  
 8 the applicable volume for any of calendar  
 9 years 2016 through 2022 for advanced  
 10 biofuels shall be determined in accordance  
 11 with the following table:

<b><i>Calendar year:</i></b>	<b><i>Applicable volume of advanced biofuels (in billions of gallons):</i></b>
2016 .....	3.0
2017 .....	6.0
2018 .....	9.0
2019 .....	12.0
2020 .....	15.0
2021 .....	18.0
2022 .....	21.0.

1 (B) CALENDAR YEAR 2023 AND THERE-  
2 AFTER.—Subject to subparagraph (C), for the  
3 purposes of paragraph (1), the applicable vol-  
4 ume for calendar year 2023 and each calendar  
5 year thereafter shall be determined by the  
6 President, in coordination with the Secretary of  
7 Energy, the Secretary of Agriculture, and the  
8 Administrator of the Environmental Protection  
9 Agency, based on a review of the implementa-  
10 tion of the program during calendar years 2007  
11 through 2022, including a review of—

12 (i) the impact of renewable fuels on  
13 the energy security of the United States;

14 (ii) the expected annual rate of future  
15 production of renewable fuels, including  
16 advanced biofuels;

17 (iii) the impact of renewable fuels on  
18 the infrastructure of the United States, in-  
19 cluding deliverability of materials, goods,  
20 and products other than renewable fuel,  
21 and the sufficiency of infrastructure to de-  
22 liver renewable fuel; and

23 (iv) the impact of the use of renewable  
24 fuels on other factors, including job cre-  
25 ation, the price and supply of agricultural

1 commodities, rural economic development,  
2 and the environment.

3 (C) MINIMUM APPLICABLE VOLUME.—Sub-  
4 ject to subparagraph (D), for the purpose of  
5 paragraph (1), the applicable volume for cal-  
6 endar year 2023 and each calendar year there-  
7 after shall be equal to the product obtained by  
8 multiplying—

9 (i) the number of gallons of gasoline  
10 that the President estimates will be sold or  
11 introduced into commerce in the calendar  
12 year; and

13 (ii) the ratio that—

14 (I) 36,000,000,000 gallons of re-  
15 newable fuel; bears to

16 (II) the number of gallons of gas-  
17 oline sold or introduced into com-  
18 merce in calendar year 2022.

19 (D) MINIMUM PERCENTAGE OF ADVANCED  
20 BIOFUEL.—For the purpose of paragraph (1)  
21 and subparagraph (C), at least 60 percent of  
22 the minimum applicable volume for calendar  
23 year 2023 and each calendar year thereafter  
24 shall be advanced biofuel.

25 (b) APPLICABLE PERCENTAGES.—



1           (1) PROVISION OF ESTIMATE OF VOLUMES OF  
2       GASOLINE SALES.—Not later than October 31 of  
3       each of calendar years 2008 through 2021, the Ad-  
4       ministrator of the Energy Information Administra-  
5       tion shall provide to the President an estimate, with  
6       respect to the following calendar year, of the vol-  
7       umes of gasoline projected to be sold or introduced  
8       into commerce in the United States.

9           (2) DETERMINATION OF APPLICABLE PERCENT-  
10      AGES.—

11           (A) IN GENERAL.—Not later than Novem-  
12      ber 30 of each of calendar years 2008 through  
13      2022, based on the estimate provided under  
14      paragraph (1), the President shall determine  
15      and publish in the Federal Register, with re-  
16      spect to the following calendar year, the renew-  
17      able fuel obligation that ensures that the re-  
18      quirements of subsection (a) are met.

19           (B) REQUIRED ELEMENTS.—The renew-  
20      able fuel obligation determined for a calendar  
21      year under subparagraph (A) shall—

22           (i) be applicable to refineries, blend-  
23      ers, and importers, as appropriate;

1 (ii) be expressed in terms of a volume  
2 percentage of gasoline sold or introduced  
3 into commerce in the United States; and  
4 (iii) subject to paragraph (3)(A), con-  
5 sist of a single applicable percentage that  
6 applies to all categories of persons speci-  
7 fied in clause (i).

8 (3) ADJUSTMENTS.—In determining the appli-  
9 cable percentage for a calendar year, the President  
10 shall make adjustments—

11 (A) to prevent the imposition of redundant  
12 obligations on any person specified in para-  
13 graph (2)(B)(i); and

14 (B) to account for the use of renewable  
15 fuel during the previous calendar year by small  
16 refineries that are exempt under subsection (g).

17 (c) VOLUME CONVERSION FACTORS FOR RENEW-  
18 ABLE FUELS BASED ON ENERGY CONTENT OR REQUIRE-  
19 MENTS.—

20 (1) IN GENERAL.—For the purpose of sub-  
21 section (a), the President shall assign values to spe-  
22 cific types of advanced biofuels for the purpose of  
23 satisfying the fuel volume requirements of subsection  
24 (a)(2) in accordance with this subsection.

1           (2) ENERGY CONTENT RELATIVE TO ETH-  
2           ANOL.—For advanced biofuel, 1 gallon of the ad-  
3           vanced biofuel shall be considered to be the equiva-  
4           lent of 1 gallon of renewable fuel multiplied by the  
5           ratio that—

6                   (A) the number of British thermal units of  
7           energy produced by the combustion of 1 gallon  
8           of the advanced biofuel (as measured under  
9           conditions determined by the Secretary); bears  
10          to

11                   (B) the number of British thermal units of  
12          energy produced by the combustion of 1 gallon  
13          of pure ethanol (as measured under conditions  
14          determined by the Secretary to be comparable  
15          to conditions described in subparagraph (A)).

16           (3) TRANSITIONAL ENERGY-RELATED CONVER-  
17          SION FACTORS FOR CELLULOSIC BIOMASS ETH-  
18          ANOL.—For any of calendar years 2008 through  
19          2015, 1 gallon of cellulosic biomass ethanol shall be  
20          considered to be the equivalent of 2.5 gallons of re-  
21          newable fuel.

22          (d) CREDIT PROGRAM.—

23                   (1) IN GENERAL.—The President, in consulta-  
24          tion with the Secretary and the Administrator of the  
25          Environmental Protection Agency, shall implement a

1 credit program to manage the renewable fuel re-  
2 quirement of this section in a manner consistent  
3 with the credit program established by the amend-  
4 ment made by section 1501(a)(2) of the Energy Pol-  
5 icy Act of 2005 (Public Law 109–58; 119 Stat.  
6 1067).

7 (2) MARKET TRANSPARENCY.—In carrying out  
8 the credit program under this subsection, the Presi-  
9 dent shall facilitate price transparency in markets  
10 for the sale and trade of credits, with due regard for  
11 the public interest, the integrity of those markets,  
12 fair competition, and the protection of consumers  
13 and agricultural producers.

14 (e) SEASONAL VARIATIONS IN RENEWABLE FUEL  
15 USE.—

16 (1) STUDY.—For each of calendar years 2008  
17 through 2022, the Administrator of the Energy In-  
18 formation Administration shall conduct a study of  
19 renewable fuel blending to determine whether there  
20 are excessive seasonal variations in the use of renew-  
21 able fuel.

22 (2) REGULATION OF EXCESSIVE SEASONAL  
23 VARIATIONS.—If, for any calendar year, the Admin-  
24 istrator of the Energy Information Administration,  
25 based on the study under paragraph (1), makes the

1       determinations specified in paragraph (3), the Presi-  
2       dent shall promulgate regulations to ensure that 25  
3       percent or more of the quantity of renewable fuel  
4       necessary to meet the requirements of subsection (a)  
5       is used during each of the 2 periods specified in  
6       paragraph (4) of each subsequent calendar year.

7               (3) DETERMINATIONS.—The determinations re-  
8       ferred to in paragraph (2) are that—

9               (A) less than 25 percent of the quantity of  
10       renewable fuel necessary to meet the require-  
11       ments of subsection (a) has been used during 1  
12       of the 2 periods specified in paragraph (4) of  
13       the calendar year;

14              (B) a pattern of excessive seasonal vari-  
15       ation described in subparagraph (A) will con-  
16       tinue in subsequent calendar years; and

17              (C) promulgating regulations or other re-  
18       quirements to impose a 25 percent or more sea-  
19       sonal use of renewable fuels will not  
20       significantly—

21               (i) increase the price of motor fuels to  
22       the consumer; or

23               (ii) prevent or interfere with the at-  
24       tainment of national ambient air quality  
25       standards.

1 (4) PERIODS.—The 2 periods referred to in this  
2 subsection are—

3 (A) April through September; and

4 (B) January through March and October  
5 through December.

6 (f) WAIVERS.—

7 (1) IN GENERAL.—The President, in consulta-  
8 tion with the Secretary of Energy, the Secretary of  
9 Agriculture, and the Administrator of the Environ-  
10 mental Protection Agency, may waive the require-  
11 ments of subsection (a) in whole or in part on peti-  
12 tion by one or more States by reducing the national  
13 quantity of renewable fuel required under subsection  
14 (a), based on a determination by the President  
15 (after public notice and opportunity for comment),  
16 that—

17 (A) implementation of the requirement  
18 would severely harm the economy or environ-  
19 ment of a State, a region, or the United States;  
20 or

21 (B) extreme and unusual circumstances  
22 exist that prevent distribution of an adequate  
23 supply of domestically-produced renewable fuel  
24 to consumers in the United States.

1           (2) PETITIONS FOR WAIVERS.—The President,  
2           in consultation with the Secretary of Energy, the  
3           Secretary of Agriculture, and the Administrator of  
4           the Environmental Protection Agency, shall approve  
5           or disapprove a State petition for a waiver of the re-  
6           quirements of subsection (a) within 30 days after  
7           the date on which the petition is received by the  
8           President.

9           (3) TERMINATION OF WAIVERS.—A waiver  
10          granted under paragraph (1) shall terminate after 1  
11          year, but may be renewed by the President after  
12          consultation with the Secretary of Energy, the Sec-  
13          retary of Agriculture, and the Administrator of the  
14          Environmental Protection Agency.

15         (g) SMALL REFINERIES.—

16                 (1) TEMPORARY EXEMPTION.—

17                         (A) IN GENERAL.—The requirements of  
18                         subsection (a) shall not apply to—

19                                 (i) small refineries (other than a small  
20                                 refinery described in clause (ii)) until cal-  
21                                 endar year 2013; and

22                                 (ii) small refineries owned by a small  
23                                 business refiner (as defined in section  
24                                 45H(c) of the Internal Revenue Code of  
25                                 1986) until calendar year 2015.

1 (B) EXTENSION OF EXEMPTION.—

2 (i) STUDY BY SECRETARY.—Not later  
3 than December 31, 2008, the Secretary  
4 shall submit to the President and Congress  
5 a report describing the results of a study  
6 to determine whether compliance with the  
7 requirements of subsection (a) would im-  
8 pose a disproportionate economic hardship  
9 on small refineries.

10 (ii) EXTENSION OF EXEMPTION.—In  
11 the case of a small refinery that the Sec-  
12 retary determines under clause (i) would  
13 be subject to a disproportionate economic  
14 hardship if required to comply with sub-  
15 section (a), the President shall extend the  
16 exemption under subparagraph (A) for the  
17 small refinery for a period of not less than  
18 2 additional years.

19 (2) PETITIONS BASED ON DISPROPORTIONATE  
20 ECONOMIC HARDSHIP.—

21 (A) EXTENSION OF EXEMPTION.—A small  
22 refinery may at any time petition the President  
23 for an extension of the exemption under para-  
24 graph (1) for the reason of disproportionate  
25 economic hardship.



1 (B) EVALUATION OF PETITIONS.—In eval-  
2 uating a petition under subparagraph (A), the  
3 President, in consultation with the Secretary,  
4 shall consider the findings of the study under  
5 paragraph (1)(B) and other economic factors.

6 (C) DEADLINE FOR ACTION ON PETI-  
7 TIONS.—The President shall act on any petition  
8 submitted by a small refinery for a hardship ex-  
9 emption not later than 90 days after the date  
10 of receipt of the petition.

11 (3) OPT-IN FOR SMALL REFINERIES.—A small  
12 refinery shall be subject to the requirements of sub-  
13 section (a) if the small refinery notifies the Presi-  
14 dent that the small refinery waives the exemption  
15 under paragraph (1).

16 (h) PENALTIES AND ENFORCEMENT.—

17 (1) CIVIL PENALTIES.—

18 (A) IN GENERAL.—Any person that vio-  
19 lates a regulation promulgated under subsection  
20 (a), or that fails to furnish any information re-  
21 quired under such a regulation, shall be liable  
22 to the United States for a civil penalty of not  
23 more than the total of—

24 (i) \$25,000 for each day of the viola-  
25 tion; and

1 (ii) the amount of economic benefit or  
2 savings received by the person resulting  
3 from the violation, as determined by the  
4 President.

5 (B) COLLECTION.—Civil penalties under  
6 subparagraph (A) shall be assessed by, and col-  
7 lected in a civil action brought by, the Secretary  
8 or such other officer of the United States as is  
9 designated by the President.

10 (2) INJUNCTIVE AUTHORITY.—

11 (A) IN GENERAL.—The district courts of  
12 the United States shall have jurisdiction to—

13 (i) restrain a violation of a regulation  
14 promulgated under subsection (a);

15 (ii) award other appropriate relief;  
16 and

17 (iii) compel the furnishing of informa-  
18 tion required under the regulation.

19 (B) ACTIONS.—An action to restrain such  
20 violations and compel such actions shall be  
21 brought by and in the name of the United  
22 States.

23 (C) SUBPOENAS.—In the action, a sub-  
24 poena for a witness who is required to attend

1 a district court in any district may apply in any  
2 other district.

3 (i) VOLUNTARY LABELING PROGRAM.—

4 (1) IN GENERAL.—The President shall establish  
5 criteria for a system of voluntary labeling of renew-  
6 able fuels based on life cycle greenhouse gas emis-  
7 sions.

8 (2) CONSUMER EDUCATION.—The President  
9 shall ensure that the labeling system under this sub-  
10 section provides useful information to consumers  
11 making fuel purchases.

12 (3) FLEXIBILITY.—In carrying out this sub-  
13 section, the President may establish more than 1  
14 label, as appropriate.

15 (j) STUDY OF IMPACT OF RENEWABLE FUEL STAND-  
16 ARD.—

17 (1) IN GENERAL.—The Secretary shall enter  
18 into an arrangement with the National Academy of  
19 Sciences under which the Academy shall conduct a  
20 study to assess the impact of the requirements de-  
21 scribed in subsection (a)(2) on each industry relat-  
22 ing to the production of feed grains, livestock, food,  
23 and energy.

24 (2) PARTICIPATION.—In conducting the study  
25 under paragraph (1), the National Academy of

1 Sciences shall seek the participation, and consider  
2 the input, of—

3 (A) producers of feed grains;

4 (B) producers of livestock, poultry, and  
5 pork products;

6 (C) producers of food and food products;

7 (D) producers of energy;

8 (E) individuals and entities interested in  
9 issues relating to conservation, the environment,  
10 and nutrition; and

11 (F) users of renewable fuels.

12 (3) CONSIDERATIONS.—In conducting the  
13 study, the National Academy of Sciences shall  
14 consider—

15 (A) the likely impact on domestic animal  
16 agriculture feedstocks that, in any crop year,  
17 are significantly below current projections; and

18 (B) policy options to alleviate the impact  
19 on domestic animal agriculture feedstocks that  
20 are significantly below current projections.

21 (4) COMPONENTS.—The study shall include—

22 (A) a description of the conditions under  
23 which the requirements described in subsection  
24 (a)(2) should be suspended or reduced to pre-  
25 vent adverse impacts to domestic animal agri-

1 culture feedstocks described in paragraph  
2 (3)(B); and

3 (B) recommendations for the means by  
4 which the Federal Government could prevent or  
5 minimize adverse economic hardships and im-  
6 pacts.

7 (5) DEADLINE FOR COMPLETION OF STUDY.—  
8 Not later than 270 days after the date of enactment  
9 of this Act, the Secretary shall submit to Congress  
10 a report that describes the results of the study.

11 (6) PERIODIC REVIEWS.—

12 (A) IN GENERAL.—To allow for the appro-  
13 priate adjustment of the requirements described  
14 in subsection (a)(2), the Secretary shall conduct  
15 periodic reviews of—

16 (i) existing technologies;

17 (ii) the feasibility of achieving compli-  
18 ance with the requirements; and

19 (iii) the impacts of the requirements  
20 described in subsection (a)(2) on each indi-  
21 vidual and entity described in paragraph  
22 (2).

23 (k) EFFECTIVE DATE.—Except as otherwise specifi-  
24 cally provided in this section, this section takes effect on

1 the date on which the National Academies of Science com-  
2 pletes the study under subsection (j).

3 **SEC. 112. PRODUCTION OF RENEWABLE FUEL USING RE-**  
4 **NEWABLE ENERGY.**

5 (a) DEFINITIONS.—In this section:

6 (1) FACILITY.—The term “facility” means a fa-  
7 cility used for the production of renewable fuel.

8 (2) RENEWABLE ENERGY.—

9 (A) IN GENERAL.—The term “renewable  
10 energy” has the meaning given the term in sec-  
11 tion 203(b) of the Energy Policy Act of 2005  
12 (42 U.S.C. 15852(b)).

13 (B) INCLUSION.—The term “renewable en-  
14 ergy” includes biogas produced through the  
15 conversion of organic matter from renewable  
16 biomass.

17 (b) ADDITIONAL CREDIT.—

18 (1) IN GENERAL.—The President shall provide  
19 a credit under the program established under section  
20 111(d) to the owner of a facility that uses renewable  
21 energy to displace more than 90 percent of the fossil  
22 fuel normally used in the production of renewable  
23 fuel.

24 (2) CREDIT AMOUNT.—The President may pro-  
25 vide the credit in a quantity that is not more than

1 the equivalent of 1.5 gallons of renewable fuel for  
2 each gallon of renewable fuel produced in a facility  
3 described in paragraph (1).

4 **SEC. 113. SENSE OF CONGRESS RELATING TO THE USE OF**  
5 **RENEWABLE RESOURCES TO GENERATE EN-**  
6 **ERGY.**

7 (a) FINDINGS.—Congress finds that—

8 (1) the United States has a quantity of renew-  
9 able energy resources that is sufficient to supply a  
10 significant portion of the energy needs of the United  
11 States;

12 (2) the agricultural, forestry, and working land  
13 of the United States can help ensure a sustainable  
14 domestic energy system;

15 (3) accelerated development and use of renew-  
16 able energy technologies provide numerous benefits  
17 to the United States, including improved national se-  
18 curity, improved balance of payments, healthier  
19 rural economies, improved environmental quality,  
20 and abundant, reliable, and affordable energy for all  
21 citizens of the United States;

22 (4) the production of transportation fuels from  
23 renewable energy would help the United States meet  
24 rapidly growing domestic and global energy de-  
25 mands, reduce the dependence of the United States

1 on energy imported from volatile regions of the  
2 world that are politically unstable, stabilize the cost  
3 and availability of energy, and safeguard the econ-  
4 omy and security of the United States;

5 (5) increased energy production from domestic  
6 renewable resources would attract substantial new  
7 investments in energy infrastructure, create eco-  
8 nomic growth, develop new jobs for the citizens of  
9 the United States, and increase the income for farm,  
10 ranch, and forestry jobs in the rural regions of the  
11 United States;

12 (6) increased use of renewable energy is prac-  
13 tical and can be cost effective with the implementa-  
14 tion of supportive policies and proper incentives to  
15 stimulate markets and infrastructure; and

16 (7) public policies aimed at enhancing renew-  
17 able energy production and accelerating techno-  
18 logical improvements will further reduce energy costs  
19 over time and increase market demand.

20 (b) SENSE OF CONGRESS.—It is the sense of Con-  
21 gress that it is the goal of the United States that, not  
22 later than January 1, 2025, the agricultural, forestry, and  
23 working land of the United States should—



1 (1) provide from renewable resources not less  
2 than 25 percent of the total energy consumed in the  
3 United States; and

4 (2) continue to produce safe, abundant, and af-  
5 fordable food, feed, and fiber.

6 **Subtitle B—Renewable Fuels**  
7 **Infrastructure**

8 **SEC. 121. INFRASTRUCTURE PILOT PROGRAM FOR RENEW-**  
9 **ABLE FUELS.**

10 (a) IN GENERAL.—The Secretary, in consultation  
11 with the Secretary of Transportation and the Adminis-  
12 trator of the Environmental Protection Agency, shall es-  
13 tablish a competitive grant pilot program (referred to in  
14 this section as the “pilot program”), to be administered  
15 through the Vehicle Technology Deployment Program of  
16 the Department of Energy, to provide not more than 10  
17 geographically-dispersed project grants to State govern-  
18 ments, Indian tribal governments, local governments, met-  
19 ropolitan transportation authorities, or partnerships of  
20 those entities to carry out 1 or more projects for the pur-  
21 poses described in subsection (b).

22 (b) GRANT PURPOSES.—A grant under this section  
23 shall be used for the establishment of refueling infrastruc-  
24 ture corridors, as designated by the Secretary, for gasoline  
25 blends that contain not less than 11 percent, and not more

1 than 85 percent, renewable fuel or diesel fuel that contains  
2 at least 10 percent renewable fuel, including—

3 (1) installation of infrastructure and equipment  
4 necessary to ensure adequate distribution of renew-  
5 able fuels within the corridor;

6 (2) installation of infrastructure and equipment  
7 necessary to directly support vehicles powered by re-  
8 newable fuels; and

9 (3) operation and maintenance of infrastructure  
10 and equipment installed as part of a project funded  
11 by the grant.

12 (c) APPLICATIONS.—

13 (1) REQUIREMENTS.—

14 (A) IN GENERAL.—Subject to subpara-  
15 graph (B), not later than 90 days after the date  
16 of enactment of this Act, the Secretary shall  
17 issue requirements for use in applying for  
18 grants under the pilot program.

19 (B) MINIMUM REQUIREMENTS.—At a min-  
20 imum, the Secretary shall require that an appli-  
21 cation for a grant under this section—

22 (i) be submitted by—

23 (I) the head of a State, tribal, or  
24 local government or a metropolitan

1 transportation authority, or any com-  
2 bination of those entities; and

3 (II) a registered participant in  
4 the Vehicle Technology Deployment  
5 Program of the Department of En-  
6 ergy; and

7 (ii) include—

8 (I) a description of the project  
9 proposed in the application, including  
10 the ways in which the project meets  
11 the requirements of this section;

12 (II) an estimate of the degree of  
13 use of the project, including the esti-  
14 mated size of fleet of vehicles operated  
15 with renewable fuel available within  
16 the geographic region of the corridor,  
17 measured as a total quantity and a  
18 percentage;

19 (III) an estimate of the potential  
20 petroleum displaced as a result of the  
21 project (measured as a total quantity  
22 and a percentage), and a plan to col-  
23 lect and disseminate petroleum dis-  
24 placement and other relevant data re-  
25 lating to the project to be funded

1 under the grant, over the expected life  
2 of the project;

3 (IV) a description of the means  
4 by which the project will be sustain-  
5 able without Federal assistance after  
6 the completion of the term of the  
7 grant;

8 (V) a complete description of the  
9 costs of the project, including acquisi-  
10 tion, construction, operation, and  
11 maintenance costs over the expected  
12 life of the project; and

13 (VI) a description of which costs  
14 of the project will be supported by  
15 Federal assistance under this sub-  
16 section.

17 (2) PARTNERS.—An applicant under paragraph  
18 (1) may carry out a project under the pilot program  
19 in partnership with public and private entities.

20 (d) SELECTION CRITERIA.—In evaluating applica-  
21 tions under the pilot program, the Secretary shall—

22 (1) consider the experience of each applicant  
23 with previous, similar projects; and

24 (2) give priority consideration to applications  
25 that—

1 (A) are most likely to maximize displace-  
2 ment of petroleum consumption, measured as a  
3 total quantity and a percentage;

4 (B) are best able to incorporate existing  
5 infrastructure while maximizing, to the extent  
6 practicable, the use of advanced biofuels;

7 (C) demonstrate the greatest commitment  
8 on the part of the applicant to ensure funding  
9 for the proposed project and the greatest likeli-  
10 hood that the project will be maintained or ex-  
11 panded after Federal assistance under this sub-  
12 section is completed;

13 (D) represent a partnership of public and  
14 private entities; and

15 (E) exceed the minimum requirements of  
16 subsection (c)(1)(B).

17 (e) PILOT PROJECT REQUIREMENTS.—

18 (1) MAXIMUM AMOUNT.—The Secretary shall  
19 provide not more than \$20,000,000 in Federal as-  
20 sistance under the pilot program to any applicant.

21 (2) COST SHARING.—The non-Federal share of  
22 the cost of any activity relating to renewable fuel in-  
23 frastructure development carried out using funds  
24 from a grant under this section shall be not less  
25 than 20 percent.

1           (3) MAXIMUM PERIOD OF GRANTS.—The Sec-  
2       retary shall not provide funds to any applicant under  
3       the pilot program for more than 2 years.

4           (4) DEPLOYMENT AND DISTRIBUTION.—The  
5       Secretary shall seek, to the maximum extent prac-  
6       ticable, to ensure a broad geographic distribution of  
7       project sites funded by grants under this section.

8           (5) TRANSFER OF INFORMATION AND KNOWL-  
9       EDGE.—The Secretary shall establish mechanisms to  
10      ensure that the information and knowledge gained  
11      by participants in the pilot program are transferred  
12      among the pilot program participants and to other  
13      interested parties, including other applicants that  
14      submitted applications.

15      (f) SCHEDULE.—

16           (1) INITIAL GRANTS.—

17               (A) IN GENERAL.—Not later than 90 days  
18              after the date of enactment of this Act, the Sec-  
19              retary shall publish in the Federal Register,  
20              Commerce Business Daily, and such other pub-  
21              lications as the Secretary considers to be appro-  
22              priate, a notice and request for applications to  
23              carry out projects under the pilot program.

24               (B) DEADLINE.—An application described  
25              in subparagraph (A) shall be submitted to the

1 Secretary by not later than 180 days after the  
2 date of publication of the notice under that sub-  
3 paragraph.

4 (C) INITIAL SELECTION.—Not later than  
5 90 days after the date by which applications for  
6 grants are due under subparagraph (B), the  
7 Secretary shall select by competitive, peer-re-  
8 viewed proposal up to 5 applications for  
9 projects to be awarded a grant under the pilot  
10 program.

11 (2) ADDITIONAL GRANTS.—

12 (A) IN GENERAL.—Not later than 2 years  
13 after the date of enactment of this Act, the Sec-  
14 retary shall publish in the Federal Register,  
15 Commerce Business Daily, and such other pub-  
16 lications as the Secretary considers to be appro-  
17 priate, a notice and request for additional appli-  
18 cations to carry out projects under the pilot  
19 program that incorporate the information and  
20 knowledge obtained through the implementation  
21 of the first round of projects authorized under  
22 the pilot program.

23 (B) DEADLINE.—An application described  
24 in subparagraph (A) shall be submitted to the  
25 Secretary by not later than 180 days after the

1 date of publication of the notice under that sub-  
2 paragraph.

3 (C) INITIAL SELECTION.—Not later than  
4 90 days after the date by which applications for  
5 grants are due under subparagraph (B), the  
6 Secretary shall select by competitive, peer-re-  
7 viewed proposal such additional applications for  
8 projects to be awarded a grant under the pilot  
9 program as the Secretary determines to be ap-  
10 propriate.

11 (g) REPORTS TO CONGRESS.—

12 (1) INITIAL REPORT.—Not later than 60 days  
13 after the date on which grants are awarded under  
14 this section, the Secretary shall submit to Congress  
15 a report containing—

16 (A) an identification of the grant recipients  
17 and a description of the projects to be funded  
18 under the pilot program;

19 (B) an identification of other applicants  
20 that submitted applications for the pilot pro-  
21 gram but to which funding was not provided;  
22 and

23 (C) a description of the mechanisms used  
24 by the Secretary to ensure that the information  
25 and knowledge gained by participants in the



1 pilot program are transferred among the pilot  
2 program participants and to other interested  
3 parties, including other applicants that sub-  
4 mitted applications.

5 (2) EVALUATION.—Not later than 2 years after  
6 the date of enactment of this Act, and annually  
7 thereafter until the termination of the pilot program,  
8 the Secretary shall submit to Congress a report con-  
9 taining an evaluation of the effectiveness of the pilot  
10 program, including an assessment of the petroleum  
11 displacement and benefits to the environment de-  
12 rived from the projects included in the pilot pro-  
13 gram.

14 (h) AUTHORIZATION OF APPROPRIATIONS.—There is  
15 authorized to be appropriated to the Secretary to carry  
16 out this section \$200,000,000, to remain available until  
17 expended.

18 **SEC. 122. BIOENERGY RESEARCH AND DEVELOPMENT.**

19 Section 931(c) of the Energy Policy Act of 2005 (42  
20 U.S.C. 16231(c)) is amended—

21 (1) in paragraph (2), by striking  
22 “\$251,000,000” and inserting “\$377,000,000”; and  
23 (2) in paragraph (3), by striking  
24 “\$274,000,000” and inserting “\$398,000,000”.

1   **SEC. 123. BIORESEARCH CENTERS FOR SYSTEMS BIOLOGY**  
2                   **PROGRAM.**

3           Section 977(a)(1) of the Energy Policy Act of 2005  
4   (42 U.S.C. 16317(a)(1)) is amended by inserting before  
5   the period at the end the following: “, including the estab-  
6   lishment of at least 11 bioresearch centers of varying  
7   sizes, as appropriate, that focus on biofuels, of which at  
8   least 2 centers shall be located in each of the 4 Petroleum  
9   Administration for Defense Districts with no subdistricts  
10   and 1 center shall be located in each of the subdistricts  
11   of the Petroleum Administration for Defense District with  
12   subdistricts”.

13   **SEC. 124. LOAN GUARANTEES FOR RENEWABLE FUEL FA-**  
14                   **CILITIES.**

15           (a) IN GENERAL.—Section 1703 of the Energy Policy  
16   Act of 2005 (42 U.S.C. 16513) is amended by adding at  
17   the end the following:

18           “(f) RENEWABLE FUEL FACILITIES.—

19                   “(1) IN GENERAL.—The Secretary may make  
20           guarantees under this title for projects that produce  
21           advanced biofuel (as defined in section 102 of the  
22           Biofuels for Energy Security and Transportation  
23           Act of 2007).

24                   “(2) REQUIREMENTS.—A project under this  
25           subsection shall employ new or significantly im-  
26           proved technologies for the production of renewable

1       fuels as compared to commercial technologies in  
2       service in the United States at the time that the  
3       guarantee is issued.

4           “(3) ISSUANCE OF FIRST LOAN GUARANTEES.—  
5       The requirement of section 20320(b) of division B  
6       of the Continuing Appropriations Resolution, 2007  
7       (Public Law 109–289, Public Law 110–5), relating  
8       to the issuance of final regulations, shall not apply  
9       to the first 6 guarantees issued under this sub-  
10      section.

11          “(4) PROJECT DESIGN.—A project for which a  
12      guarantee is made under this subsection shall have  
13      a project design that has been validated through the  
14      operation of a continuous process pilot facility with  
15      an annual output of at least 50,000 gallons of eth-  
16      anol or the energy equivalent volume of other ad-  
17      vanced biofuels.

18          “(5) MAXIMUM GUARANTEED PRINCIPAL.—The  
19      total principal amount of a loan guaranteed under  
20      this subsection may not exceed \$250,000,000 for a  
21      single facility.

22          “(6) AMOUNT OF GUARANTEE.—The Secretary  
23      shall guarantee 100 percent of the principal and in-  
24      terest due on 1 or more loans made for a facility

1       that is the subject of the guarantee under paragraph  
2       (3).

3               “(7) DEADLINE.—The Secretary shall approve  
4       or disapprove an application for a guarantee under  
5       this subsection not later than 90 days after the date  
6       of receipt of the application.

7               “(8) REPORT.—Not later than 30 days after  
8       approving or disapproving an application under  
9       paragraph (7), the Secretary shall submit to Con-  
10      gress a report on the approval or disapproval (in-  
11      cluding the reasons for the action).”.

12      (b) IMPROVEMENTS TO UNDERLYING LOAN GUAR-  
13      ANTEE AUTHORITY.—

14              (1) DEFINITION OF COMMERCIAL TECH-  
15      NOLOGY.—Section 1701(1) of the Energy Policy Act  
16      of 2005 (42 U.S.C. 16511(1)) is amended by strik-  
17      ing subparagraph (B) and inserting the following:

18              “(B) EXCLUSION.—The term ‘commercial  
19      technology’ does not include a technology if the  
20      sole use of the technology is in connection  
21      with—

22                      “(i) a demonstration plant; or

23                      “(ii) a project for which the Secretary  
24      approved a loan guarantee.”.

1           (2) SPECIFIC APPROPRIATION OR CONTRIBU-  
2           TION.—Section 1702 of the Energy Policy Act of  
3           2005 (42 U.S.C. 16512) is amended by striking sub-  
4           section (b) and inserting the following:

5           “(b) SPECIFIC APPROPRIATION OR CONTRIBU-  
6           TION.—

7           “(1) IN GENERAL.—No guarantee shall be  
8           made unless—

9           “(A) an appropriation for the cost has  
10          been made; or

11          “(B) the Secretary has received from the  
12          borrower a payment in full for the cost of the  
13          obligation and deposited the payment into the  
14          Treasury.

15          “(2) LIMITATION.—The source of payments re-  
16          ceived from a borrower under paragraph (1)(B) shall  
17          not be a loan or other debt obligation that is made  
18          or guaranteed by the Federal Government.

19          “(3) RELATION TO OTHER LAWS.—Section  
20          504(b) of the Federal Credit Reform Act of 1990 (2  
21          U.S.C. 661c(b)) shall not apply to a loan or loan  
22          guarantee made in accordance with paragraph  
23          (1)(B).”.

1           (3) AMOUNT.—Section 1702 of the Energy Pol-  
2       icy Act of 2005 (42 U.S.C. 16512) is amended by  
3       striking subsection (c) and inserting the following:

4       “(c) AMOUNT.—

5           “(1) IN GENERAL.—Subject to paragraph (2),  
6       the Secretary shall guarantee up to 100 percent of  
7       the principal and interest due on 1 or more loans for  
8       a facility that are the subject of the guarantee.

9           “(2) LIMITATION.—The total amount of loans  
10      guaranteed for a facility by the Secretary shall not  
11      exceed 80 percent of the total cost of the facility, as  
12      estimated at the time at which the guarantee is  
13      issued.”.

14          (4) SUBROGATION.—Section 1702(g)(2) of the  
15      Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2))  
16      is amended—

17              (A) by striking subparagraph (B); and

18              (B) by redesignating subparagraph (C) as  
19      subparagraph (B).

20          (5) FEES.—Section 1702(h) of the Energy Pol-  
21      icy Act of 2005 (42 U.S.C. 16512(h)) is amended by  
22      striking paragraph (2) and inserting the following:

23          “(2) AVAILABILITY.—Fees collected under this  
24      subsection shall—

1           “(A) be deposited by the Secretary into a  
2           special fund in the Treasury to be known as the  
3           ‘Incentives For Innovative Technologies Fund’;  
4           and

5           “(B) remain available to the Secretary for  
6           expenditure, without further appropriation or  
7           fiscal year limitation, for administrative ex-  
8           penses incurred in carrying out this title.”.

9   **SEC. 125. GRANTS FOR RENEWABLE FUEL PRODUCTION RE-**  
10                   **SEARCH AND DEVELOPMENT IN CERTAIN**  
11                   **STATES.**

12       (a) IN GENERAL.—The Secretary shall provide  
13       grants to eligible entities to conduct research into, and de-  
14       velop and implement, renewable fuel production tech-  
15       nologies in States with low rates of ethanol production,  
16       including low rates of production of cellulosic biomass eth-  
17       anol, as determined by the Secretary.

18       (b) ELIGIBILITY.—To be eligible to receive a grant  
19       under the section, an entity shall—

20           (1)(A) be an institution of higher education (as  
21           defined in section 2 of the Energy Policy Act of  
22           2005 (42 U.S.C. 15801)) located in a State de-  
23           scribed in subsection (a);

24           (B) be an institution—

1 (i) referred to in section 532 of the Equity  
2 in Educational Land-Grant Status Act of 1994  
3 (Public Law 103–382; 7 U.S.C. 301 note);

4 (ii) that is eligible for a grant under the  
5 Tribally Controlled College or University Assist-  
6 ance Act of 1978 (25 U.S.C. 1801 et seq.), in-  
7 cluding Diné College; or

8 (iii) that is eligible for a grant under the  
9 Navajo Community College Act (25 U.S.C.  
10 640a et seq.); or

11 (C) be a consortium of such institutions of  
12 higher education, industry, State agencies, Indian  
13 tribal agencies, or local government agencies located  
14 in the State; and

15 (2) have proven experience and capabilities with  
16 relevant technologies.

17 (c) AUTHORIZATION OF APPROPRIATIONS.—There is  
18 authorized to be appropriated to carry out this section  
19 \$25,000,000 for each of fiscal years 2008 through 2010.

20 **SEC. 126. GRANTS FOR INFRASTRUCTURE FOR TRANSPOR-**  
21 **TATION OF BIOMASS TO LOCAL BIOREFIN-**  
22 **ERIES.**

23 (a) IN GENERAL.—The Secretary shall conduct a  
24 program under which the Secretary shall provide grants  
25 to Indian tribal and local governments and other eligible



1 entities (as determined by the Secretary) (referred to in  
2 this section as “eligible entities”) to promote the develop-  
3 ment of infrastructure to support the separation, produc-  
4 tion, processing, and transportation of biomass to local  
5 biorefineries, including by portable processing equipment.

6 (b) PHASES.—The Secretary shall conduct the pro-  
7 gram in the following phases:

8 (1) DEVELOPMENT.—In the first phase of the  
9 program, the Secretary shall make grants to eligible  
10 entities to assist the eligible entities in the develop-  
11 ment of local projects to promote the development of  
12 infrastructure to support the separation, production,  
13 processing, and transportation of biomass to local  
14 biorefineries, including by portable processing equip-  
15 ment.

16 (2) IMPLEMENTATION.—In the second phase of  
17 the program, the Secretary shall make competitive  
18 grants to eligible entities to implement projects de-  
19 veloped under paragraph (1).

20 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
21 are authorized to be appropriated such sums as are nec-  
22 essary to carry out this section.

23 **SEC. 127. BIOREFINERY INFORMATION CENTER.**

24 (a) IN GENERAL.—The Secretary, in cooperation  
25 with the Secretary of Agriculture, shall establish a bio-

1 refinery information center to make available to interested  
2 parties information on—

- 3           (1) renewable fuel resources, including informa-  
4           tion on programs and incentives for renewable fuels;  
5           (2) renewable fuel producers;  
6           (3) renewable fuel users; and  
7           (4) potential renewable fuel users.

8           (b) ADMINISTRATION.—In administering the bio-  
9 refinery information center, the Secretary shall—

- 10           (1) continually update information provided by  
11           the center;  
12           (2) make information available to interested  
13           parties on the process for establishing a biorefinery;  
14           and  
15           (3) make information and assistance provided  
16           by the center available through a toll-free telephone  
17           number and website.

18           (c) AUTHORIZATION OF APPROPRIATIONS.—There  
19 are authorized to be appropriated such sums as are nec-  
20 essary to carry out this section.

21 **SEC. 128. ALTERNATIVE FUEL DATABASE AND MATERIALS.**

22           The Secretary and the Director of the National Insti-  
23 tute of Standards and Technology shall jointly establish  
24 and make available to the public—

1           (1) a database that describes the physical prop-  
2           erties of different types of alternative fuel; and

3           (2) standard reference materials for different  
4           types of alternative fuel.

5   **SEC. 129. FUEL TANK CAP LABELING REQUIREMENT.**

6           Section 406(a) of the Energy Policy Act of 1992 (42  
7   U.S.C. 13232(a)) is amended—

8           (1) by striking “The Federal Trade Commis-  
9           sion” and inserting the following:

10           “(1) IN GENERAL.—The Federal Trade Com-  
11           mission”; and

12           (2) by adding at the end the following:

13           “(2) FUEL TANK CAP LABELING REQUIRE-  
14           MENT.—Beginning with model year 2010, the fuel  
15           tank cap of each alternative fueled vehicle manufac-  
16           tured for sale in the United States shall be clearly  
17           labeled to inform consumers that such vehicle can  
18           operate on alternative fuel.”.

19   **SEC. 130. BIODIESEL.**

20           (a) IN GENERAL.—Not later than 180 days after the  
21           date of enactment of this Act, the Secretary shall submit  
22           to Congress a report on any research and development  
23           challenges inherent in increasing to 5 percent the propor-  
24           tion of diesel fuel sold in the United States that is bio-

1 diesel (as defined in section 757 of the Energy Policy Act  
2 of 2005 (42 U.S.C. 16105)).

3 (b) REGULATIONS.—The President shall promulgate  
4 regulations providing for the uniform labeling of biodiesel  
5 blends that are certified to meet applicable standards pub-  
6 lished by the American Society for Testing and Materials.

7 (c) NATIONAL BIODIESEL FUEL QUALITY STAND-  
8 ARD.—

9 (1) QUALITY REGULATIONS.—Not later than  
10 180 days after the date of enactment of this Act, the  
11 President shall promulgate regulations to ensure  
12 that each diesel-equivalent fuel derived from renew-  
13 able biomass and introduced into interstate com-  
14 merce is tested and certified to comply with applica-  
15 ble standards of the American Society for Testing  
16 and Materials.

17 (2) ENFORCEMENT.—The President shall en-  
18 sure that all biodiesel entering interstate commerce  
19 meets the requirements of paragraph (1).

20 (3) FUNDING.—There are authorized to be ap-  
21 propriated to the President to carry out this section:

22 (A) \$3,000,000 for fiscal year 2008.

23 (B) \$3,000,000 for fiscal year 2009.

24 (C) \$3,000,000 for fiscal year 2010.

1 **SEC. 131. TRANSITIONAL ASSISTANCE FOR FARMERS WHO**  
2 **PLANT DEDICATED ENERGY CROPS FOR A**  
3 **LOCAL CELLULOSIC REFINERY.**

4 (a) DEFINITIONS.—In this section:

5 (1) CELLULOSIC CROP.—The term “cellulosic  
6 crop” means a tree or grass that is grown  
7 specifically—

8 (A) to provide raw materials (including  
9 feedstocks) for conversion to liquid transpor-  
10 tation fuels or chemicals through biochemical or  
11 thermochemical processes; or

12 (B) for energy generation through combus-  
13 tion, pyrolysis, or cofiring.

14 (2) CELLULOSIC REFINER.—The term “cel-  
15 lulosic refiner” means the owner or operator of a  
16 cellulosic refinery.

17 (3) CELLULOSIC REFINERY.—The term “cel-  
18 lulosic refinery” means a refinery that processes a  
19 cellulosic crop.

20 (4) QUALIFIED CELLULOSIC CROP.—The term  
21 “qualified cellulosic crop” means, with respect to an  
22 agricultural producer, a cellulosic crop that is—

23 (A) the subject of a contract or memo-  
24 randum of understanding between the producer  
25 and a cellulosic refiner, under which the pro-

1           ducer is obligated to sell the crop to the cel-  
2           lulosic refiner by a certain date; and

3                   (B) produced not more than 70 miles from  
4           a cellulosic refinery owned or operated by the  
5           cellulosic refiner.

6           (5) SECRETARY.—The term “Secretary” means  
7           the Secretary of Agriculture.

8           (b) TRANSITIONAL ASSISTANCE PAYMENTS.—The  
9           Secretary shall make transitional assistance payments to  
10          an agricultural producer during the first year in which the  
11          producer devotes land to the production of a qualified cel-  
12          lulosic crop.

13          (c) AMOUNT OF PAYMENT.—

14                  (1) DETERMINED BY FORMULA.—Subject to  
15          paragraph (2), the Secretary shall devise a formula  
16          to be used to calculate the amount of a payment to  
17          be made to an agricultural producer under this sec-  
18          tion, based on the opportunity cost (as determined  
19          in accordance with such standard as the Secretary  
20          may establish, taking into consideration land rental  
21          rates and other applicable costs) incurred by the  
22          producer during the first year in which the producer  
23          devotes land to the production of the qualified cel-  
24          lulosic crop.

1           (2) LIMITATION.—The total of the amount paid  
2           to a producer under this section shall not exceed an  
3           amount equal to 25 percent of the amounts made  
4           available under subsection (e) for the applicable fis-  
5           cal year.

6           (d) REGULATIONS.—The Secretary shall promulgate  
7           such regulations as the Secretary determines to be nec-  
8           essary to carry out this section.

9           (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
10          authorized to be appropriated to carry out this section  
11          \$4,088,000 for each of fiscal years 2008 through 2012,  
12          to remain available until expended.

13       **SEC. 132. RESEARCH AND DEVELOPMENT IN SUPPORT OF**  
14                       **LOW-CARBON FUELS.**

15          (a) DECLARATION OF POLICY.—Congress declares  
16          that, in order to achieve maximum reductions in green-  
17          house gas emissions, enhance national security, and en-  
18          sure the protection of wildlife habitat, biodiversity, water  
19          quality, air quality, and rural and regional economies  
20          throughout the lifecycle of each low-carbon fuel, it is nec-  
21          essary and desirable to undertake a combination of basic  
22          and applied research, as well as technology development  
23          and demonstration, involving the colleges and universities  
24          of the United States, in partnership with the Federal Gov-  
25          ernment, State governments, and the private sector.

1 (b) PURPOSE.—The purpose of this section is to pro-  
2 vide for research support to facilitate the development of  
3 sustainable markets and technologies to produce and use  
4 woody biomass and other low-carbon fuels for the produc-  
5 tion of thermal and electric energy, biofuels, and bioprod-  
6 ucts.

7 (c) DEFINITION OF FUEL EMISSION BASELINE.—In  
8 this section, the term “fuel emission baseline” means the  
9 average lifecycle greenhouse gas emissions per unit of en-  
10 ergy of the fossil fuel component of conventional transpor-  
11 tation fuels in commerce in the United States in calendar  
12 year 2008, as determined by the President.

13 (d) GRANT PROGRAM.—The President shall establish  
14 a program to provide to eligible entities (as identified by  
15 the President) grants for use in—

16 (1) providing financial support for not more  
17 than 4 nor less than 6 demonstration facilities  
18 that—

19 (A) use woody biomass to deploy advanced  
20 technologies for production of thermal and elec-  
21 tric energy, biofuels, and bioproducts; and

22 (B) are targeted at regional feedstocks and  
23 markets;

24 (2) conducting targeted research for the devel-  
25 opment of cellulosic ethanol and other liquid fuels



1 from woody or other biomass that may be used in  
2 transportation or stationary applications, such as in-  
3 dustrial processes or industrial, commercial, and res-  
4 idential heating;

5 (3) conducting research into the best scientif-  
6 ically-based and periodically-updated methods of as-  
7 sessing and certifying the impacts of each low-car-  
8 bon fuel with respect to—

9 (A) the reduction in lifecycle greenhouse  
10 gas emissions of each fuel as compared to—

11 (i) the fuel emission baseline; and

12 (ii) the greenhouse gas emissions of  
13 other sectors, such as the agricultural, in-  
14 dustrial, and manufacturing sectors;

15 (B) the contribution of the fuel toward en-  
16 hancing the energy security of the United  
17 States by displacing imported petroleum and  
18 petroleum products;

19 (C) any impacts of the fuel on wildlife  
20 habitat, biodiversity, water quality, and air  
21 quality; and

22 (D) any effect of the fuel with respect to  
23 rural and regional economies;

24 (4) conducting research to determine to what  
25 extent the use of low-carbon fuels in the transpor-

1       tation sector would impact greenhouse gas emissions  
2       in other sectors, such as the agricultural, industrial,  
3       and manufacturing sectors;

4           (5) conducting research for the development of  
5       the supply infrastructure that may provide renew-  
6       able biomass feedstocks in a consistent, predictable,  
7       and environmentally-sustainable manner;

8           (6) conducting research for the development of  
9       supply infrastructure that may provide renewable  
10      low-carbon fuels in a consistent, predictable, and en-  
11      vironmentally-sustainable manner; and

12          (7) conducting policy research on the global  
13      movement of low-carbon fuels in a consistent, pre-  
14      dictable, and environmentally-sustainable manner.

15      (e) AUTHORIZATION OF APPROPRIATIONS.—Of the  
16      funding authorized under section 122, there are author-  
17      ized to be appropriated to carry out this section—

18           (1) \$45,000,000 for fiscal year 2009;

19           (2) \$50,000,000 for fiscal year 2010;

20           (3) \$55,000,000 for fiscal year 2011;

21           (4) \$60,000,000 for fiscal year 2012; and

22           (5) \$65,000,000 for fiscal year 2013.

## Subtitle C—Studies

### 2 SEC. 141. STUDY OF ADVANCED BIOFUELS TECHNOLOGIES.

3 (a) IN GENERAL.—Not later than October 1, 2012,  
4 the Secretary shall offer to enter into a contract with the  
5 National Academy of Sciences under which the Academy  
6 shall conduct a study of technologies relating to the pro-  
7 duction, transportation, and distribution of advanced  
8 biofuels.

9 (b) SCOPE.—In conducting the study, the Academy  
10 shall—

11 (1) include an assessment of the maturity of  
12 advanced biofuels technologies;

13 (2) consider whether the rate of development of  
14 those technologies will be sufficient to meet the ad-  
15 vanced biofuel standards required under section 111;

16 (3) consider the effectiveness of the research  
17 and development programs and activities of the De-  
18 partment of Energy relating to advanced biofuel  
19 technologies; and

20 (4) make policy recommendations to accelerate  
21 the development of those technologies to commercial  
22 viability, as appropriate.

23 (c) REPORT.—Not later than November 30, 2014,  
24 the Secretary shall submit to the Committee on Energy  
25 and Natural Resources of the Senate and the Committee

1 on Energy and Commerce of the House of Representatives  
2 a report describing the results of the study conducted  
3 under this section.

4 **SEC. 142. STUDY OF INCREASED CONSUMPTION OF ETH-**  
5 **ANOL-BLENDED GASOLINE WITH HIGHER**  
6 **LEVELS OF ETHANOL.**

7 (a) IN GENERAL.—The Secretary, in cooperation  
8 with the Secretary of Agriculture, the Administrator of the  
9 Environmental Protection Agency, and the Secretary of  
10 Transportation, and after providing notice and an oppor-  
11 tunity for public comment, shall conduct a study of the  
12 feasibility of increasing consumption in the United States  
13 of ethanol-blended gasoline with levels of ethanol that are  
14 not less than 10 percent and not more than 40 percent.

15 (b) STUDY.—The study under subsection (a) shall  
16 include—

17 (1) a review of production and infrastructure  
18 constraints on increasing consumption of ethanol;

19 (2) an evaluation of the economic, market, and  
20 energy-related impacts of State and regional dif-  
21 ferences in ethanol blends;

22 (3) an evaluation of the economic, market, and  
23 energy-related impacts on gasoline retailers and con-  
24 sumers of separate and distinctly labeled fuel stor-  
25 age facilities and dispensers;

1           (4) an evaluation of the environmental impacts  
2           of mid-level ethanol blends on evaporative and ex-  
3           haust emissions from on-road, off-road, and marine  
4           engines, recreational boats, vehicles, and equipment;

5           (5) an evaluation of the impacts of mid-level  
6           ethanol blends on the operation, durability, and per-  
7           formance of on-road, off-road, and marine engines,  
8           recreational boats, vehicles, and equipment; and

9           (6) an evaluation of the safety impacts of mid-  
10          level ethanol blends on consumers that own and op-  
11          erate off-road and marine engines, recreational  
12          boats, vehicles, or equipment.

13          (c) REPORT.—Not later than 1 year after the date  
14          of enactment of this Act, the Secretary shall submit to  
15          Congress a report describing the results of the study con-  
16          ducted under this section.

17      **SEC. 143. PIPELINE FEASIBILITY STUDY.**

18          (a) IN GENERAL.—The Secretary, in coordination  
19          with the Secretary of Agriculture and the Secretary of  
20          Transportation, shall conduct a study of the feasibility of  
21          the construction of dedicated ethanol pipelines.

22          (b) FACTORS.—In conducting the study, the Sec-  
23          retary shall consider—

24                  (1) the quantity of ethanol production that  
25                  would make dedicated pipelines economically viable;

1           (2) existing or potential barriers to dedicated  
2 ethanol pipelines, including technical, siting, financ-  
3 ing, and regulatory barriers;

4           (3) market risk (including throughput risk) and  
5 means of mitigating the risk;

6           (4) regulatory, financing, and siting options  
7 that would mitigate risk in those areas and help en-  
8 sure the construction of 1 or more dedicated ethanol  
9 pipelines;

10          (5) financial incentives that may be necessary  
11 for the construction of dedicated ethanol pipelines,  
12 including the return on equity that sponsors of the  
13 initial dedicated ethanol pipelines will require to in-  
14 vest in the pipelines;

15          (6) technical factors that may compromise the  
16 safe transportation of ethanol in pipelines, identi-  
17 fying remedial and preventative measures to ensure  
18 pipeline integrity; and

19          (7) such other factors as the Secretary con-  
20 siderers appropriate.

21       (c) REPORT.—Not later than 15 months after the  
22 date of enactment of this Act, the Secretary shall submit  
23 to Congress a report describing the results of the study  
24 conducted under this section.

1   **SEC. 144. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED**  
2                   **VEHICLES TO USE E-85 FUEL.**

3           (a) IN GENERAL.—The Secretary shall conduct a  
4 study of methods of increasing the fuel efficiency of flexi-  
5 ble fueled vehicles by optimizing flexible fueled vehicles to  
6 operate using E-85 fuel.

7           (b) REPORT.—Not later than 180 days after the date  
8 of enactment of this Act, the Secretary shall submit to  
9 the Committee on Energy and Natural Resources of the  
10 Senate and the Committee on Natural Resources of the  
11 House of Representatives a report that describes the re-  
12 sults of the study, including any recommendations of the  
13 Secretary.

14   **SEC. 145. STUDY OF CREDITS FOR USE OF RENEWABLE**  
15                   **ELECTRICITY IN ELECTRIC VEHICLES.**

16           (a) DEFINITION OF ELECTRIC VEHICLE.—In this  
17 section, the term “electric vehicle” means an electric  
18 motor vehicle (as defined in section 601 of the Energy Pol-  
19 icy Act of 1992 (42 U.S.C. 13271)) for which the re-  
20 chargeable storage battery—

21                   (1) receives a charge directly from a source of  
22 electric current that is external to the vehicle; and

23                   (2) provides a minimum of 80 percent of the  
24 motive power of the vehicle.

25           (b) STUDY.—The Secretary shall conduct a study on  
26 the feasibility of issuing credits under the program estab-

1 lished under section 111(d) to electric vehicles powered by  
2 electricity produced from renewable energy sources.

3 (c) REPORT.—Not later than 18 months after the  
4 date of enactment of this Act, the Secretary shall submit  
5 to the Committee on Energy and Natural Resources of  
6 the Senate and the Committee on Energy and Commerce  
7 of the House of Representatives a report that describes  
8 the results of the study, including a description of—

9 (1) existing programs and studies on the use of  
10 renewable electricity as a means of powering electric  
11 vehicles; and

12 (2) alternatives for—

13 (A) designing a pilot program to determine  
14 the feasibility of using renewable electricity to  
15 power electric vehicles as an adjunct to a re-  
16 newable fuels mandate;

17 (B) allowing the use, under the pilot pro-  
18 gram designed under subparagraph (A), of elec-  
19 tricity generated from nuclear energy as an ad-  
20 ditional source of supply;

21 (C) identifying the source of electricity  
22 used to power electric vehicles; and

23 (D) equating specific quantities of elec-  
24 tricity to quantities of renewable fuel under sec-  
25 tion 111(d).



1 **SEC. 146. STUDY OF ENGINE DURABILITY ASSOCIATED**  
2 **WITH THE USE OF BIODIESEL.**

3 (a) IN GENERAL.—Not later than 30 days after the  
4 date of enactment of this Act, the Secretary shall initiate  
5 a study on the effects of the use of biodiesel on engine  
6 durability.

7 (b) COMPONENTS.—The study under this section  
8 shall include—

9 (1) an assessment of whether the use of bio-  
10 diesel in conventional diesel engines lessens engine  
11 durability; and

12 (2) an assessment of the effects referred to in  
13 subsection (a) with respect to biodiesel blends at  
14 varying concentrations, including—

15 (A) B5;

16 (B) B10;

17 (C) B20; and

18 (D) B30.

19 **SEC. 147. STUDY OF INCENTIVES FOR RENEWABLE FUELS.**

20 (a) STUDY.—The President shall conduct a study of  
21 the renewable fuels industry and markets in the United  
22 States, including—

23 (1) the costs to produce conventional and ad-  
24 vanced biofuels;

1           (2) the factors affecting the future market  
2       prices for those biofuels, including world oil prices;  
3       and

4           (3) the financial incentives necessary to en-  
5       hance, to the maximum extent practicable, the  
6       biofuels industry of the United States to reduce the  
7       dependence of the United States on foreign oil dur-  
8       ing calendar years 2011 through 2030.

9       (b) GOALS.—The study shall include an analysis of  
10   the options for financial incentives and the advantage and  
11   disadvantages of each option.

12       (c) REPORT.—Not later than 1 year after the date  
13   of enactment of this Act, the President shall submit to  
14   Congress a report that describes the results of the study.

15   **SEC. 148. STUDY OF STREAMLINED LIFECYCLE ANALYSIS**  
16                           **TOOLS FOR THE EVALUATION OF RENEW-**  
17                           **ABLE CARBON CONTENT OF BIOFUELS.**

18       (a) IN GENERAL.—The Secretary, in consultation  
19   with the Secretary of Agriculture and the Administrator  
20   of the Environmental Protection Agency, shall conduct a  
21   study of—

22           (1) published methods for evaluating the  
23       lifecycle fossil and renewable carbon content of fuels,  
24       including conventional and advanced biofuels; and

1           (2) methods for performing simplified, stream-  
2           lined lifecycle analyses of the fossil and renewable  
3           carbon content of biofuels.

4           (b) REPORT.—Not later than 1 year after the date  
5           of enactment of this Act, the Secretary shall submit to  
6           the Committee on Energy and Natural Resources of the  
7           Senate and the Committee on Energy and Commerce of  
8           the House of Representatives a report that describes the  
9           results of the study under subsection (a), including rec-  
10          ommendations for a method for performing a simplified,  
11          streamlined lifecycle analysis of the fossil and renewable  
12          carbon content of biofuels that includes—

13                 (1) carbon inputs to feedstock production; and

14                 (2) carbon inputs to the biofuel production  
15           process, including the carbon associated with elec-  
16           trical and thermal energy inputs.

17   **SEC. 149. STUDY OF EFFECTS OF ETHANOL-BLENDED GASO-**  
18                   **LINE ON OFF-ROAD VEHICLES.**

19           (a) STUDY.—

20                 (1) IN GENERAL.—The Secretary, in consulta-  
21           tion with the Secretary of Transportation and the  
22           Administrator of the Environmental Protection  
23           Agency, shall conduct a study to determine the ef-  
24           fects of ethanol-blended gasoline on off-road vehicles  
25           and recreational boats.

1           (2) EVALUATION.—The study shall include an  
2           evaluation of the operational, safety, durability, and  
3           environmental impacts of ethanol-blended gasoline  
4           on off-road and marine engines, recreational boats,  
5           and related equipment.

6           (b) REPORT.—Not later than 1 year after the date  
7           of enactment of this Act, the Secretary shall submit to  
8           Congress a report describing the results of the study.

9   **SEC. 150. STUDY OF OFFSHORE WIND RESOURCES.**

10          (a) DEFINITIONS.—In this section:

11               (1) ELIGIBLE INSTITUTION.—The term “eligi-  
12               ble institution” means a college or university that—

13                       (A) as of the date of enactment of this  
14                       Act, has an offshore wind power research pro-  
15                       gram; and

16                       (B) is located in a region of the United  
17                       States that is in reasonable proximity to the  
18                       eastern outer Continental Shelf, as determined  
19                       by the Secretary.

20               (2) SECRETARY.—The term “Secretary” means  
21               the Secretary of the Interior, acting through the Di-  
22               rector of the Minerals Management Service.

23               (b) STUDY.—The Secretary, in cooperation with an  
24               eligible institution, as selected by the Secretary, shall con-

1 duct a study to assess each offshore wind resource located  
2 in the region of the eastern outer Continental Shelf.

3 (c) REPORT.—Upon completion of the study under  
4 subsection (b), the Secretary shall submit to Congress a  
5 report that includes—

6 (1) a description of—

7 (A) the locations and total power genera-  
8 tion resources of the best offshore wind re-  
9 sources located in the region of the eastern  
10 outer Continental Shelf, as determined by the  
11 Secretary;

12 (B) based on conflicting zones relating to  
13 any infrastructure that, as of the date of enact-  
14 ment of this Act, is located in close proximity  
15 to any offshore wind resource, the likely exclu-  
16 sion zones of each offshore wind resource de-  
17 scribed in subparagraph (A);

18 (C) the relationship of the temporal vari-  
19 ation of each offshore wind resource described  
20 in subparagraph (A) with—

21 (i) any other offshore wind resource;

22 and

23 (ii) with loads and corresponding sys-  
24 tem operator markets;

1 (D) the geological compatibility of each  
2 offshore wind resource described in subpara-  
3 graph (A) with any potential technology relat-  
4 ing to sea floor towers; and

5 (E) with respect to each area in which an  
6 offshore wind resource described in subpara-  
7 graph (A) is located, the relationship of the au-  
8 thority under any coastal management plan of  
9 the State in which the area is located with the  
10 Federal Government; and

11 (2) recommendations on the manner by which  
12 to handle offshore wind intermittence.

13 (d) INCORPORATION OF STUDY.—Effective beginning  
14 on the date on which the Secretary completes the study  
15 under subsection (b), the Secretary shall incorporate the  
16 findings included in the report under subsection (c) into  
17 the planning process documents for any wind energy lease  
18 sale—

19 (1) relating to any offshore wind resource lo-  
20 cated in any appropriate area of the outer Conti-  
21 nental Shelf, as determined by the Secretary; and

22 (2) that is completed on or after the date of en-  
23 actment of this Act.

24 (e) EFFECT.—Nothing in this section—

1 (1) delays any final regulation to be promul-  
2 gated by the Secretary of the Interior to carry out  
3 section 8(p) of the Outer Continental Shelf Lands  
4 Act (43 U.S.C. 1337(p)); or

5 (2) limits the authority of the Secretary to lease  
6 any offshore wind resource located in any appro-  
7 priate area of the outer Continental Shelf, as deter-  
8 mined by the Secretary.

9 (f) AUTHORIZATION OF APPROPRIATIONS.—There is  
10 authorized to be appropriated to carry out this section  
11 \$5,000,000, to remain available until expended.

12 **Subtitle D—Environmental**  
13 **Safeguards**

14 **SEC. 161. GRANTS FOR PRODUCTION OF ADVANCED**  
15 **BIOFUELS.**

16 (a) IN GENERAL.—The Secretary shall establish a  
17 grant program to encourage the production of advanced  
18 biofuels.

19 (b) REQUIREMENTS AND PRIORITY.—In making  
20 grants under this section, the Secretary—

21 (1) shall make awards to the proposals for ad-  
22 vanced biofuels with the greatest reduction in  
23 lifecycle greenhouse gas emissions compared to the  
24 comparable motor vehicle fuel lifecycle emissions  
25 during calendar year 2007; and

1           (2) shall not make an award to a project that  
2           does not achieve at least a 50-percent reduction in  
3           such lifecycle greenhouse gas emissions.

4           (c) AUTHORIZATION OF APPROPRIATIONS.—There is  
5           authorized to be appropriated to carry out this section  
6           \$500,000,000 for the period of fiscal years 2008 through  
7           2015.

8   **SEC. 162. STUDIES OF EFFECTS OF RENEWABLE FUEL USE.**

9           Section 211 of the Clean Air Act (42 U.S.C. 7545)  
10          is amended by adding at the end the following:

11          “(t) STUDIES OF EFFECTS OF RENEWABLE FUEL  
12          USE.—

13               “(1) IN GENERAL.—Not later than 1 year after  
14          the date of enactment of this subsection, the Admin-  
15          istrator shall offer to enter into appropriate arrange-  
16          ments with the National Academy of Sciences and  
17          any other independent research institute determined  
18          to be appropriate by the Administrator, in consulta-  
19          tion with appropriate Federal agencies, to conduct 2  
20          studies on the effects of increased domestic use of  
21          renewable fuels under the Renewable Fuels, Con-  
22          sumer Protection, and Energy Efficiency Act of  
23          2007.

24               “(2) MATTERS TO BE STUDIED.—



1           “(A) IN GENERAL.—The studies under this  
2 subsection shall assess, quantify, and rec-  
3 ommend analytical methodologies in relation to  
4 environmental changes associated with the in-  
5 creased domestic use of renewable fuels under  
6 the Renewable Fuels, Consumer Protection, and  
7 Energy Efficiency Act of 2007, including pro-  
8 duction, handling, transportation, and use of  
9 the fuels.

10           “(B) SPECIFIC MATTERS.—The studies  
11 shall include an assessment and quantification,  
12 to the maximum extent practicable, of signifi-  
13 cant changes—

14           “(i) in air and water quality and the  
15 quality of other natural resources;

16           “(ii) in land use patterns;

17           “(iii) in the rate of deforestation in  
18 the United States and globally;

19           “(iv) to greenhouse gas emissions;

20           “(v) to significant geographic areas  
21 and habitats with high biodiversity values  
22 (including species richness, the presence of  
23 species that are exclusively native to a  
24 place, or the presence of endangered spe-  
25 cies); or

1 “(vi) in the long-term capacity of the  
2 United States to produce biomass feed-  
3 stocks.

4 “(C) BASELINE COMPARISON.—In making  
5 an assessment or quantifying effects of in-  
6 creased use of renewable fuels, the studies shall  
7 use an appropriate baseline involving increased  
8 use of the conventional transportation fuels, if  
9 displacement by use of renewable fuels had not  
10 occurred.

11 “(3) REPORTS TO CONGRESS.—The Adminis-  
12 trator shall submit to Congress a report summa-  
13 rizing the assessments and findings of—

14 “(A) the first study, along with any rec-  
15 ommendations by the Administrator to mitigate  
16 adverse effects identified by the study, not later  
17 than 3 years after the date of enactment of this  
18 subsection; and

19 “(B) the second study, along with any rec-  
20 ommendations by the Administrator to mitigate  
21 adverse effects identified by the study, not later  
22 December 31, 2015.”.

1 **SEC. 163. INTEGRATED CONSIDERATION OF WATER QUAL-**  
2 **ITY IN DETERMINATIONS ON FUELS AND**  
3 **FUEL ADDITIVES.**

4 Section 211(c)(1) of the Clean Air Act (42 U.S.C.  
5 7545(c)(1)) is amended—

6 (1) by striking “nonroad vehicle (A) if in the  
7 judgment of the Administrator” and inserting  
8 “nonroad vehicle—

9 “(A) if, in the judgment of the Adminis-  
10 trator, any fuel or fuel additive or”;

11 (2) in subparagraph (A), by striking “air pollu-  
12 tion which” and inserting “air pollution or water  
13 pollution (including any degradation in the quality of  
14 groundwater) that”; and

15 (3) by striking “, or (B) if” and inserting the  
16 following: “; or

17 “(B) if”.

18 **SEC. 164. ANTI-BACKSLIDING.**

19 Section 211 of the Clean Air Act (42 U.S.C. 7545)  
20 (as amended by section 162) is amended by adding at the  
21 end the following:

22 “(u) **PREVENTION OF AIR QUALITY DETERIORA-**  
23 **TION.—**

24 “(1) **STUDY.—**

25 “(A) **IN GENERAL.—**Not later than 18  
26 months after the date of enactment of the Re-

1           newable Fuels, Consumer Protection, and En-  
2           ergy Efficiency Act of 2007, the Administrator  
3           shall complete a study to determine whether the  
4           renewable fuel volumes required by that Act will  
5           adversely impact air quality as a result of  
6           changes in vehicle and engine emissions of air  
7           pollutants regulated under this Act.

8           “(B) CONSIDERATIONS.—The study shall  
9           include consideration of—

10                   “(i) different blend levels, types of re-  
11                   newable fuels, and available vehicle tech-  
12                   nologies; and

13                   “(ii) appropriate national, regional,  
14                   and local air quality control measures.

15           “(2) REGULATIONS.—Not later than 3 years  
16           after the date of enactment of the Renewable Fuels,  
17           Consumer Protection, and Energy Efficiency Act of  
18           2007, the Administrator shall—

19                   “(A) promulgate regulations to implement  
20                   appropriate measures to mitigate, to the great-  
21                   est extent achievable, considering the results of  
22                   the study under paragraph (1), any adverse im-  
23                   pacts on air quality, as the result of the renew-  
24                   able volumes required by that Act; or

1 “(B) make a determination that no such  
2 measures are necessary.

3 “(3) OTHER REQUIREMENTS.—Nothing in title  
4 I of the Renewable Fuels, Consumer Protection, and  
5 Energy Efficiency Act of 2007 supercedes or other-  
6 wise affects any Federal or State requirement under  
7 any other provision of law that is more stringent  
8 than any requirement of this title.”.

9 **TITLE II—ENERGY EFFICIENCY**  
10 **PROMOTION**

11 **SEC. 201. SHORT TITLE.**

12 This title may be cited as the “Energy Efficiency  
13 Promotion Act of 2007”.

14 **SEC. 202. DEFINITION OF SECRETARY.**

15 In this title, the term “Secretary” means the Sec-  
16 retary of Energy.

17 **Subtitle A—Promoting Advanced**  
18 **Lighting Technologies**

19 **SEC. 211. ACCELERATED PROCUREMENT OF ENERGY EFFI-**  
20 **CIENT LIGHTING.**

21 Section 553 of the National Energy Conservation  
22 Policy Act (42 U.S.C. 8259b) is amended by adding the  
23 following:

24 “(f) ACCELERATED PROCUREMENT OF ENERGY EF-  
25 FICIENT LIGHTING.—

1           “(1) IN GENERAL.—Not later than October 1,  
2           2013, in accordance with guidelines issued by the  
3           Secretary, all general purpose lighting in Federal  
4           buildings shall be Energy Star products or products  
5           designated under the Federal Energy Management  
6           Program.

7           “(2) GUIDELINES.—

8                   “(A) IN GENERAL.—Not later than 1 year  
9                   after the date of enactment of this subsection,  
10                  the Secretary shall issue guidelines to carry out  
11                  this subsection.

12                   “(B) REPLACEMENT COSTS.—The guide-  
13                  lines shall take into consideration the costs of  
14                  replacing all general service lighting and the re-  
15                  duced cost of operation and maintenance ex-  
16                  pected to result from such replacement.”.

17   **SEC. 212. INCANDESCENT REFLECTOR LAMP EFFICIENCY**  
18                   **STANDARDS.**

19           (a) DEFINITIONS.—Section 321 of the Energy Policy  
20   and Conservation Act (42 U.S.C. 6291) is amended—

21                   (1) in paragraph (30)(C)(ii)—

22                           (A) in the matter preceding subclause

23                           (I)—

1 (i) by striking “or similar bulb shapes  
2 (excluding ER or BR)” and inserting “ER,  
3 BR, BPAR, or similar bulb shapes”; and

4 (ii) by striking “2.75” and inserting  
5 “2.25”; and

6 (B) by striking “is either—” and all that  
7 follows through subclause (II) and inserting  
8 “has a rated wattage that is 40 watts or high-  
9 er”; and

10 (2) by adding at the end the following:

11 “(52) BPAR INCANDESCENT REFLECTOR  
12 LAMP.—The term ‘BPAR incandescent reflector  
13 lamp’ means a reflector lamp as shown in figure  
14 C78.21–278 on page 32 of ANSI C78.21–2003.

15 “(53) BR INCANDESCENT REFLECTOR LAMP;  
16 BR30; BR40.—

17 “(A) BR INCANDESCENT REFLECTOR  
18 LAMP.—The term ‘BR incandescent reflector  
19 lamp’ means a reflector lamp that has—

20 “(i) a bulged section below the major  
21 diameter of the bulb and above the approx-  
22 imate baseline of the bulb, as shown in fig-  
23 ure 1 (RB) on page 7 of ANSI C79.1–  
24 1994, incorporated by reference in section  
25 430.22 of title 10, Code of Federal Regula-

1                   tions (as in effect on the date of enactment  
2                   of this paragraph); and

3                   “(ii) a finished size and shape shown  
4                   in ANSI C78.21–1989, including the ref-  
5                   erenced reflective characteristics in part 7  
6                   of ANSI C78.21–1989, incorporated by  
7                   reference in section 430.22 of title 10,  
8                   Code of Federal Regulations (as in effect  
9                   on the date of enactment of this para-  
10                  graph).

11                  “(B) BR30.—The term ‘BR30’ means a  
12                  BR incandescent reflector lamp with a diameter  
13                  of 30/8ths of an inch.

14                  “(C) BR40.—The term ‘BR40’ means a  
15                  BR incandescent reflector lamp with a diameter  
16                  of 40/8ths of an inch.

17                  “(54) ER INCANDESCENT REFLECTOR LAMP;  
18                  ER30; ER40.—

19                  “(A) ER INCANDESCENT REFLECTOR  
20                  LAMP.—The term ‘ER incandescent reflector  
21                  lamp’ means a reflector lamp that has—

22                  “(i) an elliptical section below the  
23                  major diameter of the bulb and above the  
24                  approximate baseline of the bulb, as shown  
25                  in figure 1 (RE) on page 7 of ANSI



1 C79.1–1994, incorporated by reference in  
2 section 430.22 of title 10, Code of Federal  
3 Regulations (as in effect on the date of en-  
4 actment of this paragraph); and

5 “(ii) a finished size and shape shown  
6 in ANSI C78.21–1989, incorporated by  
7 reference in section 430.22 of title 10,  
8 Code of Federal Regulations (as in effect  
9 on the date of enactment of this para-  
10 graph).

11 “(B) ER30.—The term ‘ER30’ means an  
12 ER incandescent reflector lamp with a diameter  
13 of 30/8ths of an inch.

14 “(C) ER40.—The term ‘ER40’ means an  
15 ER incandescent reflector lamp with a diameter  
16 of 40/8ths of an inch.

17 “(55) R20 INCANDESCENT REFLECTOR  
18 LAMP.—The term ‘R20 incandescent reflector lamp’  
19 means a reflector lamp that has a face diameter of  
20 approximately 2.5 inches, as shown in figure 1(R)  
21 on page 7 of ANSI C79.1–1994.”.

22 (b) STANDARDS FOR FLUORESCENT LAMPS AND IN-  
23 CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the  
24 Energy Policy and Conservation Act (42 U.S.C. 6925(i))

1 is amended by striking paragraph (1) and inserting the  
2 following:

3 “(1) STANDARDS.—

4 “(A) DEFINITION OF EFFECTIVE DATE.—

5 In this paragraph (other than subparagraph  
6 (D)), the term ‘effective date’ means, with re-  
7 spect to each type of lamp specified in a table  
8 contained in subparagraph (B), the last day of  
9 the period of months corresponding to that type  
10 of lamp (as specified in the table) that follows  
11 October 24, 1992.

12 “(B) MINIMUM STANDARDS.—Each of the  
13 following general service fluorescent lamps and  
14 incandescent reflector lamps manufactured  
15 after the effective date specified in the tables  
16 contained in this paragraph shall meet or ex-  
17 ceed the following lamp efficacy and CRI stand-  
18 ards:

“FLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
4-foot medium bi-pin .....	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped .....	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot slimline .....	65 W	69	80.0	18
	≤65 W	45	80.0	18
8-foot high output .....	>100 W	69	80.0	18
	≤100 W	45	80.0	18

## “INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
40–50 .....	10.5	36
51–66 .....	11.0	36
67–85 .....	12.5	36
86–115 .....	14.0	36
116–155 .....	14.5	36
156–205 .....	15.0	36

1                   “(C) EXEMPTIONS.—The standards speci-  
2                   fied in subparagraph (B) shall not apply to the  
3                   following types of incandescent reflector lamps:

4                   “(i) Lamps rated at 50 watts or less  
5                   that are ER30, BR30, BR40, or ER40  
6                   lamps.

7                   “(ii) Lamps rated at 65 watts that  
8                   are BR30, BR40, or ER40 lamps.

9                   “(iii) R20 incandescent reflector  
10                  lamps rated 45 watts or less.

11                  “(D) EFFECTIVE DATES.—

12                  “(i) ER, BR, AND BPAR LAMPS.—The  
13                  standards specified in subparagraph (B)  
14                  shall apply with respect to ER incandes-  
15                  cent reflector lamps, BR incandescent re-  
16                  flector lamps, BPAR incandescent reflector  
17                  lamps, and similar bulb shapes on and  
18                  after January 1, 2008.

19                  “(ii) LAMPS BETWEEN 2.25–2.75  
20                  INCHES IN DIAMETER.—The standards

1 specified in subparagraph (B) shall apply  
2 with respect to incandescent reflector  
3 lamps with a diameter of more than 2.25  
4 inches, but not more than 2.75 inches, on  
5 and after January 1, 2008.”.

6 **SEC. 213. BRIGHT TOMORROW LIGHTING PRIZES.**

7 (a) ESTABLISHMENT.—Not later than 1 year after  
8 the date of enactment of this Act, as part of the program  
9 carried out under section 1008 of the Energy Policy Act  
10 of 2005 (42 U.S.C. 16396), the Secretary shall establish  
11 and award Bright Tomorrow Lighting Prizes for solid  
12 state lighting in accordance with this section.

13 (b) PRIZE SPECIFICATIONS.—

14 (1) 60-WATT INCANDESCENT REPLACEMENT  
15 LAMP PRIZE.—The Secretary shall award a 60-Watt  
16 Incandescent Replacement Lamp Prize to an entrant  
17 that produces a solid-state light package simulta-  
18 neously capable of—

19 (A) producing a luminous flux greater than  
20 900 lumens;

21 (B) consuming less than or equal to 10  
22 watts;

23 (C) having an efficiency greater than 90  
24 lumens per watt;

1 (D) having a color rendering index greater  
2 than 90;

3 (E) having a correlated color temperature  
4 of not less than 2,750, and not more than  
5 3,000, degrees Kelvin;

6 (F) having 70 percent of the lumen value  
7 under subparagraph (A) exceeding 25,000  
8 hours under typical conditions expected in resi-  
9 dential use;

10 (G) having a light distribution pattern  
11 similar to a soft 60-watt incandescent A19  
12 bulb;

13 (H) having a size and shape that fits with-  
14 in the maximum dimensions of an A19 bulb in  
15 accordance with American National Standards  
16 Institute standard C78.20–2003, figure  
17 C78.20–211;

18 (I) using a single contact medium screw  
19 socket; and

20 (J) mass production for a competitive sales  
21 commercial market satisfied by the submission  
22 of 10,000 such units equal to or exceeding the  
23 criteria described in subparagraphs (A) through  
24 (I).

1           (2) PAR TYPE 38 HALOGEN REPLACEMENT  
2 LAMP PRIZE.—The Secretary shall award a  
3 Parabolic Aluminized Reflector Type 38 Halogen  
4 Replacement Lamp Prize (referred to in this section  
5 as the “PAR Type 38 Halogen Replacement Lamp  
6 Prize”) to an entrant that produces a solid-state-  
7 light package simultaneously capable of—

8           (A) producing a luminous flux greater than  
9 or equal to 1,350 lumens;

10           (B) consuming less than or equal to 11  
11 watts;

12           (C) having an efficiency greater than 123  
13 lumens per watt;

14           (D) having a color rendering index greater  
15 than or equal to 90;

16           (E) having a correlated color coordinate  
17 temperature of not less than 2,750, and not  
18 more than 3,000, degrees Kelvin;

19           (F) having 70 percent of the lumen value  
20 under subparagraph (A) exceeding 25,000  
21 hours under typical conditions expected in resi-  
22 dential use;

23           (G) having a light distribution pattern  
24 similar to a PAR 38 halogen lamp;

1 (H) having a size and shape that fits with-  
2 in the maximum dimensions of a PAR 38 halo-  
3 gen lamp in accordance with American National  
4 Standards Institute standard C78-21-2003,  
5 figure C78.21-238;

6 (I) using a single contact medium screw  
7 socket; and

8 (J) mass production for a competitive sales  
9 commercial market satisfied by the submission  
10 of 10,000 such units equal to or exceeding the  
11 criteria described in subparagraphs (A) through  
12 (I).

13 (3) TWENTY-FIRST CENTURY LAMP PRIZE.—  
14 The Secretary shall award a Twenty-First Century  
15 Lamp Prize to an entrant that produces a solid-  
16 state-light-light capable of—

17 (A) producing a light output greater than  
18 1,200 lumens;

19 (B) having an efficiency greater than 150  
20 lumens per watt;

21 (C) having a color rendering index greater  
22 than 90;

23 (D) having a color coordinate temperature  
24 between 2,800 and 3,000 degrees Kelvin; and

1 (E) having a lifetime exceeding 25,000  
2 hours.

3 (c) PRIVATE FUNDS.—The Secretary may accept and  
4 use funding from private sources as part of the prizes  
5 awarded under this section.

6 (d) TECHNICAL REVIEW.—The Secretary shall estab-  
7 lish a technical review committee composed of non-Federal  
8 officers to review entrant data submitted under this sec-  
9 tion to determine whether the data meets the prize speci-  
10 fications described in subsection (b).

11 (e) THIRD PARTY ADMINISTRATION.—The Secretary  
12 may competitively select a third party to administer  
13 awards under this section.

14 (f) AWARD AMOUNTS.—Subject to the availability of  
15 funds to carry out this section, the amount of—

16 (1) the 60-Watt Incandescent Replacement  
17 Lamp Prize described in subsection (b)(1) shall be  
18 \$10,000,000;

19 (2) the PAR Type 38 Halogen Replacement  
20 Lamp Prize described in subsection (b)(2) shall be  
21 \$5,000,000; and

22 (3) the Twenty-First Century Lamp Prize de-  
23 scribed in subsection (b)(3) shall be \$5,000,000.

24 (g) FEDERAL PROCUREMENT OF SOLID-STATE-  
25 LIGHTS.—



1           (1) 60-WATT INCANDESCENT REPLACEMENT.—

2           Subject to paragraph (3), as soon as practicable  
3           after the successful award of the 60-Watt Incandes-  
4           cent Replacement Lamp Prize under subsection  
5           (b)(1), the Secretary (in consultation with the Ad-  
6           ministrator of General Services) shall develop gov-  
7           ernmentwide Federal purchase guidelines with a goal  
8           of replacing the use of 60-watt incandescent lamps  
9           in Federal Government buildings with a solid-state-  
10          light package described in subsection (b)(1) by not  
11          later than the date that is 5 years after the date the  
12          award is made.

13          (2) PAR 38 HALOGEN REPLACEMENT LAMP RE-  
14          PLACEMENT.—Subject to paragraph (3), as soon as  
15          practicable after the successful award of the PAR  
16          Type 38 Halogen Replacement Lamp Prize under  
17          subsection (b)(2), the Secretary (in consultation with  
18          the Administrator of General Services) shall develop  
19          governmentwide Federal purchase guidelines with  
20          the goal of replacing the use of PAR 38 halogen  
21          lamps in Federal Government buildings with a solid-  
22          state-light package described in subsection (b)(2) by  
23          not later than the date that is 5 years after the date  
24          the award is made.

25          (3) WAIVERS.—

1 (A) IN GENERAL.—The Secretary or the  
2 Administrator of General Services may waive  
3 the application of paragraph (1) or (2) if the  
4 Secretary or Administrator determines that the  
5 return on investment from the purchase of a  
6 solid-state-light package described in paragraph  
7 (1) or (2) of subsection (b), respectively, is cost  
8 prohibitive.

9 (B) REPORT OF WAIVER.—If the Secretary  
10 or Administrator waives the application of para-  
11 graph (1) or (2), the Secretary or Adminis-  
12 trator, respectively, shall submit to Congress an  
13 annual report that describes the waiver and  
14 provides a detailed justification for the waiver.

15 (h) REPORT.—Not later than 2 years after the date  
16 of enactment of this Act, and annually thereafter, the Ad-  
17 ministrator of General Services shall submit to the Energy  
18 Information Agency a report describing the quantity, type,  
19 and cost of each lighting product purchased by the Federal  
20 Government.

21 (i) BRIGHT LIGHT TOMORROW AWARD FUND.—

22 (1) ESTABLISHMENT.—There is established in  
23 the United States Treasury a Bright Light Tomor-  
24 row permanent fund without fiscal year limitation to

1       award prizes under paragraphs (1), (2), and (3) of  
2       subsection (b).

3               (2) SOURCES OF FUNDING.—The fund estab-  
4       lished under paragraph (1) shall accept—

5                       (A) fiscal year appropriations; and

6                       (B) private contributions authorized under  
7       subsection (c).

8       (j) AUTHORIZATION OF APPROPRIATIONS.—There  
9       are authorized to be appropriated such sums as are nec-  
10      essary to carry out this section.

11   **SEC. 214. SENSE OF SENATE CONCERNING EFFICIENT**  
12               **LIGHTING STANDARDS.**

13       (a) FINDINGS.—The Senate finds that—

14               (1) there are approximately 4,000,000,000  
15       screw-based sockets in the United States that con-  
16       tain traditional, energy-inefficient, incandescent light  
17       bulbs;

18               (2) incandescent light bulbs are based on tech-  
19       nology that is more than 125 years old;

20               (3) there are radically more efficient lighting al-  
21       ternatives in the market, with the promise of even  
22       more choices over the next several years;

23               (4) national policy can support a rapid substi-  
24       tution of new, energy-efficient light bulbs for the less  
25       efficient products in widespread use; and,

1           (5) transforming the United States market to  
2       use of more efficient lighting technologies can—

3           (A) reduce electric costs in the United  
4       States by more than \$18,000,000,000 annually;

5           (B) save the equivalent electricity that is  
6       produced by 80 base load coal-fired power  
7       plants; and

8           (C) reduce fossil fuel related emissions by  
9       approximately 158,000,000 tons each year.

10       (b) SENSE OF THE SENATE.—It is the sense of the  
11   Senate that the Senate should—

12           (1) pass a set of mandatory, technology-neutral  
13       standards to establish firm energy efficiency per-  
14       formance targets for lighting products;

15           (2) ensure that the standards become effective  
16       within the next 10 years; and

17           (3) in developing the standards—

18           (A) establish the efficiency requirements to  
19       ensure that replacement lamps will provide con-  
20       sumers with the same quantity of light while  
21       using significantly less energy;

22           (B) ensure that consumers will continue to  
23       have multiple product choices, including energy-  
24       saving halogen, incandescent, compact fluores-  
25       cent, and LED light bulbs; and

1 (C) work with industry and key stake-  
2 holders on measures that can assist consumers  
3 and businesses in making the important transi-  
4 tion to more efficient lighting.

5 **SEC. 215. RENEWABLE ENERGY CONSTRUCTION GRANTS.**

6 (a) DEFINITIONS.—In this section:

7 (1) ALASKA SMALL HYDROELECTRIC POWER.—

8 The term “Alaska small hydroelectric power” means  
9 power that—

10 (A) is generated—

11 (i) in the State of Alaska;

12 (ii) without the use of a dam or im-  
13 poundment of water; and

14 (iii) through the use of—

15 (I) a lake tap (but not a perched  
16 alpine lake); or

17 (II) a run-of-river screened at the  
18 point of diversion; and

19 (B) has a nameplate capacity rating of a  
20 wattage that is not more than 15 megawatts.

21 (2) ELIGIBLE APPLICANT.—The term “eligible  
22 applicant” means any—

23 (A) governmental entity;

24 (B) private utility;

25 (C) public utility;

1 (D) municipal utility;

2 (E) cooperative utility;

3 (F) Indian tribes; and

4 (G) Regional Corporation (as defined in  
5 section 3 of the Alaska Native Claims Settle-  
6 ment Act (43 U.S.C. 1602)).

7 (3) OCEAN ENERGY.—

8 (A) INCLUSIONS.—The term “ocean en-  
9 ergy” includes current, wave, and tidal energy.

10 (B) EXCLUSION.—The term “ocean en-  
11 ergy” excludes thermal energy.

12 (4) RENEWABLE ENERGY PROJECT.—The term  
13 “renewable energy project” means a project—

14 (A) for the commercial generation of elec-  
15 tricity; and

16 (B) that generates electricity from—

17 (i) solar, wind, or geothermal energy  
18 or ocean energy;

19 (ii) biomass (as defined in section  
20 203(b) of the Energy Policy Act of 2005  
21 (42 U.S.C. 15852(b)));

22 (iii) landfill gas; or

23 (iv) Alaska small hydroelectric power.

24 (b) RENEWABLE ENERGY CONSTRUCTION

25 GRANTS.—

1           (1) IN GENERAL.—The Secretary shall use  
2           amounts appropriated under this section to make  
3           grants for use in carrying out renewable energy  
4           projects.

5           (2) CRITERIA.—Not later than 180 days after  
6           the date of enactment of this Act, the Secretary  
7           shall set forth criteria for use in awarding grants  
8           under this section.

9           (3) APPLICATION.—To receive a grant from the  
10          Secretary under paragraph (1), an eligible applicant  
11          shall submit to the Secretary an application at such  
12          time, in such manner, and containing such informa-  
13          tion as the Secretary may require, including a writ-  
14          ten assurance that—

15                (A) all laborers and mechanics employed  
16                by contractors or subcontractors during con-  
17                struction, alteration, or repair that is financed,  
18                in whole or in part, by a grant under this sec-  
19                tion shall be paid wages at rates not less than  
20                those prevailing on similar construction in the  
21                locality, as determined by the Secretary of  
22                Labor in accordance with sections 3141–3144,  
23                3146, and 3147 of title 40, United States Code;  
24                and

1 (B) the Secretary of Labor shall, with re-  
2 spect to the labor standards described in this  
3 paragraph, have the authority and functions set  
4 forth in Reorganization Plan Numbered 14 of  
5 1950 (5 U.S.C. App.) and section 3145 of title  
6 40, United States Code.

7 (4) NON-FEDERAL SHARE.—Each eligible appli-  
8 cant that receives a grant under this subsection shall  
9 contribute to the total cost of the renewable energy  
10 project constructed by the eligible applicant an  
11 amount not less than 50 percent of the total cost of  
12 the project.

13 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
14 are authorized to be appropriated to the Fund such sums  
15 as are necessary to carry out this section.

16 **Subtitle B—Expediting New**  
17 **Energy Efficiency Standards**

18 **SEC. 221. DEFINITION OF ENERGY CONSERVATION STAND-**  
19 **ARD.**

20 Section 321 of the Energy Policy and Conservation  
21 Act (42 U.S.C. 6291) is amended by striking paragraph  
22 (6) and inserting the following:

23 “(6) ENERGY CONSERVATION STANDARD.—



1           “(A) IN GENERAL.—The term ‘energy con-  
2           servation standard’ means 1 or more perform-  
3           ance standards that—

4                   “(i) for covered products (excluding  
5                   clothes washers, dishwashers, showerheads,  
6                   faucets, water closets, and urinals), pre-  
7                   scribe a minimum level of energy efficiency  
8                   or a maximum quantity of energy use, de-  
9                   termined in accordance with test proce-  
10                  dures prescribed under section 323;

11                  “(ii) for showerheads, faucets, water  
12                  closets, and urinals, prescribe a minimum  
13                  level of water efficiency or a maximum  
14                  quantity of water use, determined in ac-  
15                  cordance with test procedures prescribed  
16                  under section 323; and

17                  “(iii) for clothes washers and  
18                  dishwashers—

19                   “(I) prescribe a minimum level of  
20                   energy efficiency or a maximum quan-  
21                   tity of energy use, determined in ac-  
22                   cordance with test procedures pre-  
23                   scribed under section 323; and

24                   “(II) may include a minimum  
25                   level of water efficiency or a maximum

1 quantity of water use, determined in  
2 accordance with those test procedures.

3 “(B) INCLUSIONS.—The term ‘energy con-  
4 servation standard’ includes—

5 “(i) 1 or more design requirements, if  
6 the requirements were established—

7 “(I) on or before the date of en-  
8 actment of this subclause; or

9 “(II) as part of a consensus  
10 agreement under section 325(hh); and

11 “(ii) any other requirements that the  
12 Secretary may prescribe under section  
13 325(r).

14 “(C) EXCLUSION.—The term ‘energy con-  
15 servation standard’ does not include a perform-  
16 ance standard for a component of a finished  
17 covered product, unless regulation of the com-  
18 ponent is authorized or established pursuant to  
19 this title.”.

20 **SEC. 222. REGIONAL EFFICIENCY STANDARDS FOR HEAT-**  
21 **ING AND COOLING PRODUCTS.**

22 (a) IN GENERAL.—Section 327 of the Energy Policy  
23 and Conservation Act (42 U.S.C. 6297) is amended—

24 (1) by redesignating subsections (e), (f), and

25 (g) as subsections (f), (g), and (h), respectively; and

1           (2) by inserting after subsection (d) the fol-  
2       lowing:

3       “(e) REGIONAL EFFICIENCY STANDARDS FOR HEAT-  
4       ING AND COOLING PRODUCTS.—

5           “(1) IN GENERAL.—

6               “(A) DETERMINATION.—The Secretary  
7       may determine, after notice and comment, that  
8       more stringent Federal energy conservation  
9       standards are appropriate for furnaces, boilers,  
10      or central air conditioning equipment than ap-  
11      plicable Federal energy conservation standards.

12           “(B) FINDING.—The Secretary may deter-  
13      mine that more stringent standards are appro-  
14      priate for up to 2 different regions only after  
15      finding that the regional standards—

16               “(i) would contribute to energy sav-  
17      ings that are substantially greater than  
18      that of a single national energy standard;  
19      and

20               “(ii) are economically justified.

21           “(C) REGIONS.—On making a determina-  
22      tion described in subparagraph (B), the Sec-  
23      retary shall establish the regions so that the  
24      more stringent standards would achieve the

1 maximum level of energy savings that is techno-  
2 logically feasible and economically justified.

3 “(D) FACTORS.—In determining the ap-  
4 propriateness of 1 or more regional standards  
5 for furnaces, boilers, and central and commer-  
6 cial air conditioning equipment, the Secretary  
7 shall consider all of the factors described in  
8 paragraphs (1) through (4) of section 325(o).

9 “(2) STATE PETITION.—After a determination  
10 made by the Secretary under paragraph (1), a State  
11 may petition the Secretary requesting a rule that a  
12 State regulation that establishes a standard for fur-  
13 naces, boilers, or central air conditioners become ef-  
14 fective at a level determined by the Secretary to be  
15 appropriate for the region that includes the State.

16 “(3) RULE.—Subject to paragraphs (4) through  
17 (7), the Secretary may issue the rule during the pe-  
18 riod described in paragraph (4) and after consider-  
19 ation of the petition and the comments of interested  
20 persons.

21 “(4) PROCEDURE.—

22 “(A) NOTICE.—The Secretary shall pro-  
23 vide notice of any petition filed under para-  
24 graph (2) and afford interested persons a rea-

1 sonable opportunity to make written comments,  
2 including rebuttal comments, on the petition.

3 “(B) DECISION.—Except as provided in  
4 subparagraph (C), during the 180-day period  
5 beginning on the date on which the petition is  
6 filed, the Secretary shall issue the requested  
7 rule or deny the petition.

8 “(C) EXTENSION.—The Secretary may  
9 publish in the Federal Register a notice—

10 “(i) extending the period to a speci-  
11 fied date, but not longer than 1 year after  
12 the date on which the petition is filed; and

13 “(ii) describing the reasons for the  
14 delay.

15 “(D) DENIALS.—If the Secretary denies a  
16 petition under this subsection, the Secretary  
17 shall publish in the Federal Register notice of,  
18 and the reasons for, the denial.

19 “(5) FINDING OF SIGNIFICANT BURDEN ON  
20 MANUFACTURING, MARKETING, DISTRIBUTION, SALE,  
21 OR SERVICING OF COVERED PRODUCT ON NATIONAL  
22 BASIS.—

23 “(A) IN GENERAL.—The Secretary may  
24 not issue a rule under this subsection if the  
25 Secretary finds (and publishes the finding) that

1 interested persons have established, by a pre-  
2 ponderance of the evidence, that the State regu-  
3 lation will significantly burden manufacturing,  
4 marketing, distribution, sale, or servicing of a  
5 covered product on a national basis.

6 “(B) FACTORS.—In determining whether  
7 to make a finding described in subparagraph  
8 (A), the Secretary shall evaluate all relevant  
9 factors, including—

10 “(i) the extent to which the State reg-  
11 ulation will increase manufacturing or dis-  
12 tribution costs of manufacturers, distribu-  
13 tors, and others;

14 “(ii) the extent to which the State  
15 regulation will disadvantage smaller manu-  
16 facturers, distributors, or dealers or lessen  
17 competition in the sale of the covered prod-  
18 uct in the State; and

19 “(iii) the extent to which the State  
20 regulation would cause a burden to manu-  
21 facturers to redesign and produce the cov-  
22 ered product type (or class), taking into  
23 consideration the extent to which the regu-  
24 lation would result in a reduction—

1 “(I) in the current models, or in  
2 the projected availability of models,  
3 that could be shipped on the effective  
4 date of the regulation to the State  
5 and within the United States; or

6 “(II) in the current or projected  
7 sales volume of the covered product  
8 type (or class) in the State and the  
9 United States.

10 “(6) APPLICATION.—No State regulation shall  
11 become effective under this subsection with respect  
12 to any covered product manufactured before the date  
13 specified in the determination made by the Secretary  
14 under paragraph (1).

15 “(7) PETITION TO WITHDRAW FEDERAL RULE  
16 FOLLOWING AMENDMENT OF FEDERAL STAND-  
17 ARD.—

18 “(A) IN GENERAL.—If a State has issued  
19 a rule under paragraph (3) with respect to a  
20 covered product and subsequently a Federal en-  
21 ergy conservation standard concerning the prod-  
22 uct is amended pursuant to section 325, any  
23 person subject to the State regulation may file  
24 a petition with the Secretary requesting the  
25 Secretary to withdraw the rule issued under

1 paragraph (3) with respect to the product in  
2 the State.

3 “(B) BURDEN OF PROOF.—The Secretary  
4 shall consider the petition in accordance with  
5 paragraph (5) and the burden shall be on the  
6 petitioner to show by a preponderance of the  
7 evidence that the rule received by the State  
8 under paragraph (3) should be withdrawn as a  
9 result of the amendment to the Federal stand-  
10 ard.

11 “(C) WITHDRAWAL.—If the Secretary de-  
12 termines that the petitioner has shown that the  
13 rule issued by the Secretary under paragraph  
14 (3) should be withdrawn in accordance with  
15 subparagraph (B), the Secretary shall withdraw  
16 the rule.”.

17 (b) CONFORMING AMENDMENTS.—

18 (1) Section 327 of the Energy Policy and Con-  
19 servation Act (42 U.S.C. 6297) is amended—

20 (A) in subsection (b)—

21 (i) in paragraph (2), by striking “sub-  
22 section (e)” and inserting “subsection (f)”;  
23 and

24 (ii) in paragraph (3)—



1 (I) by striking “subsection  
2 (f)(1)” and inserting “subsection  
3 (g)(1)”; and

4 (II) by striking “subsection  
5 (f)(2)” and inserting “subsection  
6 (g)(2)”; and

7 (B) in subsection (c)(3), by striking “sub-  
8 section (f)(3)” and inserting “subsection  
9 (g)(3)”.

10 (2) Section 345(b)(2) of the Energy Policy and  
11 Conservation Act (42 U.S.C. 6316(b)(2)) is amend-  
12 ed by adding at the end the following:

13 “(E) RELATIONSHIP TO CERTAIN STATE  
14 REGULATIONS.—Notwithstanding subparagraph  
15 (A), a standard prescribed or established under  
16 section 342(a) with respect to the equipment  
17 specified in subparagraphs (B), (C), (D), (H),  
18 (I), and (J) of section 340 shall not supersede  
19 a State regulation that is effective under the  
20 terms, conditions, criteria, procedures, and  
21 other requirements of section 327(e).”.

22 **SEC. 223. FURNACE FAN RULEMAKING.**

23 Section 325(f)(3) of the Energy Policy and Conserva-  
24 tion Act (42 U.S.C. 6295(f)(3)) is amended by adding at  
25 the end the following:

1 “(E) FINAL RULE.—

2 “(i) IN GENERAL.—The Secretary  
3 shall publish a final rule to carry out this  
4 subsection not later than December 31,  
5 2014.

6 “(ii) CRITERIA.—The standards shall  
7 meet the criteria established under sub-  
8 section (o).”.

9 **SEC. 224. EXPEDITED RULEMAKINGS.**

10 (a) PROCEDURE FOR PRESCRIBING NEW OR AMEND-  
11 ED STANDARDS.—Section 325(p) of the Energy Policy  
12 and Conservation Act (42 U.S.C. 6295(p)) is amended by  
13 adding at the end the following:

14 “(5) DIRECT FINAL RULES.—

15 “(A) IN GENERAL.—On receipt of a state-  
16 ment that is submitted jointly by interested per-  
17 sons that are fairly representative of relevant  
18 points of view (including representatives of  
19 manufacturers of covered products, States, and  
20 efficiency advocates), as determined by the Sec-  
21 retary, and contains recommendations with re-  
22 spect to an energy or water conservation  
23 standard—

24 “(i) if the Secretary determines that  
25 the recommended standard contained in

1 the statement is in accordance with sub-  
2 section (o) or section 342(a)(6)(B), as ap-  
3 plicable, the Secretary may issue a final  
4 rule that establishes an energy or water  
5 conservation standard and is published si-  
6 multaneously with a notice of proposed  
7 rulemaking that proposes a new or amend-  
8 ed energy or water conservation standard  
9 that is identical to the standard established  
10 in the final rule to establish the rec-  
11 ommended standard (referred to in this  
12 paragraph as a ‘direct final rule’); or

13 “(ii) if the Secretary determines that  
14 a direct final rule cannot be issued based  
15 on the statement, the Secretary shall pub-  
16 lish a notice of the determination, together  
17 with an explanation of the reasons for the  
18 determination.

19 “(B) PUBLIC COMMENT.—The Secretary  
20 shall—

21 “(i) solicit public comment with re-  
22 spect to each direct final rule issued by the  
23 Secretary under subparagraph (A)(i); and

24 “(ii) publish a response to each com-  
25 ment so received.

1                   “(C) WITHDRAWAL OF DIRECT FINAL  
2 RULES.—

3                   “(i) IN GENERAL.—Not later than  
4 120 days after the date on which a direct  
5 final rule issued under subparagraph (A)(i)  
6 is published in the Federal Register, the  
7 Secretary shall withdraw the direct final  
8 rule if—

9                   “(I) the Secretary receives 1 or  
10 more adverse public comments relat-  
11 ing to the direct final rule under sub-  
12 paragraph (B)(i); and

13                   “(II) based on the complete rule-  
14 making record relating to the direct  
15 final rule, the Secretary tentatively  
16 determines that the adverse public  
17 comments are relevant under sub-  
18 section (o), section 342(a)(6)(B), or  
19 any other applicable law.

20                   “(ii) ACTION ON WITHDRAWAL.—On  
21 withdrawal of a direct final rule under  
22 clause (i), the Secretary shall—

23                   “(I) proceed with the notice of  
24 proposed rulemaking published simul-

1                   taneously with the direct final rule as  
2                   described in subparagraph (A)(i); and  
3                   “(II) publish in the Federal Reg-  
4                   ister the reasons why the direct final  
5                   rule was withdrawn.

6                   “(iii) TREATMENT OF WITHDRAWN DI-  
7                   RECT FINAL RULES.—A direct final rule  
8                   that is withdrawn under clause (i) shall  
9                   not be considered to be a final rule for  
10                  purposes of subsection (o).

11                  “(D) EFFECT OF PARAGRAPH.—Nothing  
12                  in this paragraph authorizes the Secretary to  
13                  issue a direct final rule based solely on receipt  
14                  of more than 1 statement containing rec-  
15                  ommended standards relating to the direct final  
16                  rule.”.

17                  (b) CONFORMING AMENDMENT.—Section 345(b)(1)  
18                  of the Energy Policy and Conservation Act (42 U.S.C.  
19                  6316(b)(1)) is amended in the first sentence by inserting  
20                  “section 325(p)(5),” after “The provisions of”.

21       **SEC. 225. PERIODIC REVIEWS.**

22                  (a) TEST PROCEDURES.—Section 323(b)(1) of the  
23                  Energy Policy and Conservation Act (42 U.S.C.  
24                  6293(b)(1)) is amended by striking “(1)” and all that fol-

1 lows through the end of the paragraph and inserting the  
2 following:

3 “(1) TEST PROCEDURES.—

4 “(A) AMENDMENT.—At least once every 7  
5 years, the Secretary shall review test procedures  
6 for all covered products and—

7 “(i) amend test procedures with re-  
8 spect to any covered product, if the Sec-  
9 retary determines that amended test proce-  
10 dures would more accurately or fully com-  
11 ply with the requirements of paragraph  
12 (3); or

13 “(ii) publish notice in the Federal  
14 Register of any determination not to  
15 amend a test procedure.”.

16 (b) ENERGY CONSERVATION STANDARDS.—Section  
17 325(m) of the Energy Policy and Conservation Act (42  
18 U.S.C. 6295(m)) is amended—

19 (1) by designating the first and second sen-  
20 tences as paragraphs (1) and (4), respectively;

21 (2) by striking paragraph (1) (as so designated)  
22 and inserting the following:

23 “(1) IN GENERAL.—After issuance of the last  
24 final rules required for a product under this part,  
25 the Secretary shall, not later than 5 years after the

1 date of issuance of a final rule establishing or  
2 amending a standard or determining not to amend  
3 a standard, publish a final rule to determine whether  
4 standards for the product should or should not be  
5 amended based on the criteria in subsection (n)(2).

6 “(2) ANALYSIS.—Prior to publication of the de-  
7 termination, the Secretary shall publish a notice of  
8 availability describing the analysis of the Depart-  
9 ment and provide opportunity for written comment.

10 “(3) FINAL RULE.—Not later than 3 years  
11 after a positive determination under paragraph (1),  
12 the Secretary shall publish a final rule amending the  
13 standard for the product.”; and

14 (3) in paragraph (4) (as so designated), by  
15 striking “(4) An” and inserting the following:

16 “(4) APPLICATION OF AMENDMENT.—An”.

17 (c) STANDARDS.—Section 342(a)(6) of the Energy  
18 Policy and Conservation Act (42 U.S.C. 6313(a)(6)) is  
19 amended by striking “(6)(A)(i)” and all that follows  
20 through the end of subparagraph (A) and inserting the  
21 following:

22 “(6) AMENDED ENERGY EFFICIENCY STAND-  
23 ARDS.—

24 “(A) IN GENERAL.—

1 “(i) ANALYSIS OF POTENTIAL ENERGY  
2 SAVINGS.—If ASHRAE/IES Standard  
3 90.1 is amended with respect to any small  
4 commercial package air conditioning and  
5 heating equipment, large commercial pack-  
6 age air conditioning and heating equip-  
7 ment, very large commercial package air  
8 conditioning and heating equipment, pack-  
9 aged terminal air conditioners, packaged  
10 terminal heat pumps, warm-air furnaces,  
11 packaged boilers, storage water heaters, in-  
12 stantaneous water heaters, or unfired hot  
13 water storage tanks, not later than 180  
14 days after the amendment of the standard,  
15 the Secretary shall publish in the Federal  
16 Register for public comment an analysis of  
17 the energy savings potential of amended  
18 energy efficiency standards.

19 “(ii) AMENDED UNIFORM NATIONAL  
20 STANDARD FOR PRODUCTS.—

21 “(I) IN GENERAL.—Except as  
22 provided in subclause (II), not later  
23 than 18 months after the date of pub-  
24 lication of the amendment to the  
25 ASHRAE/IES Standard 90.1 for a



1 product described in clause (i), the  
2 Secretary shall establish an amended  
3 uniform national standard for the  
4 product at the minimum level speci-  
5 fied in the amended ASHRAE/IES  
6 Standard 90.1.

7 “(II) MORE STRINGENT STAND-  
8 ARD.—Subclause (I) shall not apply if  
9 the Secretary determines, by rule pub-  
10 lished in the Federal Register, and  
11 supported by clear and convincing evi-  
12 dence, that adoption of a uniform na-  
13 tional standard more stringent than  
14 the amended ASHRAE/IES Standard  
15 90.1 for the product would result in  
16 significant additional conservation of  
17 energy and is technologically feasible  
18 and economically justified.

19 “(iii) RULE.—If the Secretary makes  
20 a determination described in clause (ii)(II)  
21 for a product described in clause (i), not  
22 later than 30 months after the date of  
23 publication of the amendment to the  
24 ASHRAE/IES Standard 90.1 for the prod-

1                   uct, the Secretary shall issue the rule es-  
2                   tablishing the amended standard.”.

3           (d) TEST PROCEDURES.—Section 343(a) of the En-  
4   ergy Policy and Conservation Act (42 U.S.C. 6313(a)) is  
5   amended by striking “(a)” and all that follows through  
6   the end of paragraph (1) and inserting the following:

7           “(a) PRESCRIPTION BY SECRETARY; REQUIRE-  
8   MENTS.—

9           “(1) TEST PROCEDURES.—

10                   “(A) AMENDMENT.—At least once every 7  
11           years, the Secretary shall conduct an evaluation  
12           of each class of covered equipment and—

13                           “(i) if the Secretary determines that  
14                   amended test procedures would more accu-  
15                   rately or fully comply with the require-  
16                   ments of paragraphs (2) and (3), shall pre-  
17                   scribe test procedures for the class in ac-  
18                   cordance with this section; or

19                           “(ii) shall publish notice in the Fed-  
20                   eral Register of any determination not to  
21                   amend a test procedure.”.

22           (e) EFFECTIVE DATE.—The amendments made by  
23   subsections (b) and (c) take effect on January 1, 2012.

1   **SEC. 226. ENERGY EFFICIENCY LABELING FOR CONSUMER**  
2                   **ELECTRONIC PRODUCTS.**

3           (a) IN GENERAL.—Section 324(a) of the Energy Pol-  
4 icy and Conservation Act (42 U.S.C. 6294(a)) is  
5 amended—

6           (1) in paragraph (2), by adding at the end the  
7 following:

8                   “(H) LABELING REQUIREMENTS.—

9                           “(i) IN GENERAL.—Subject to clauses  
10                   (ii) through (iv), not later than 18 months  
11                   after the date of issuance of applicable De-  
12                   partment of Energy testing procedures, the  
13                   Commission, in consultation with the Sec-  
14                   retary and the Administrator of the Envi-  
15                   ronmental Protection Agency (acting  
16                   through the Energy Star program), shall,  
17                   by regulation, promulgate labeling or other  
18                   disclosure requirements for the energy use  
19                   of—

20                                   “(I) televisions;

21                                   “(II) personal computers;

22                                   “(III) cable or satellite set-top  
23                   boxes;

24                                   “(IV) stand-alone digital video  
25                   recorder boxes; and

26                                   “(V) personal computer monitors.

1 “(ii) ALTERNATE TESTING PROCE-  
2 DURES.—In the absence of applicable test-  
3 ing procedures described in clause (i) for  
4 products described in subclauses (I)  
5 through (V) of that clause, the Commis-  
6 sion may by regulation promulgate labeling  
7 requirements for a consumer product cat-  
8 egory described in clause (i) if the  
9 Commission—

10 “(I) identifies adequate non-De-  
11 partment of Energy testing proce-  
12 dures for those products; and

13 “(II) determines that labeling of  
14 those products is likely to assist con-  
15 sumers in making purchasing deci-  
16 sions.

17 “(iii) DEADLINE AND REQUIREMENTS  
18 FOR LABELING.—

19 “(I) DEADLINE.—Not later than  
20 18 months after the date of promulga-  
21 tion of any requirements under clause  
22 (i) or (ii), the Commission shall re-  
23 quire labeling of electronic products  
24 described in clause (i).

1 “(II) REQUIREMENTS.—The re-  
2 quirements promulgated under clause  
3 (i) or (ii) may include specific require-  
4 ments for each electronic product to  
5 be labeled with respect to the place-  
6 ment, size, and content of Energy  
7 Guide labels.

8 “(iv) DETERMINATION OF FEASI-  
9 BILITY.—Clause (i) or (ii) shall not apply  
10 in any case in which the Commission de-  
11 termines that labeling in accordance with  
12 this subsection—

13 “(I) is not technologically or eco-  
14 nomically feasible; or

15 “(II) is not likely to assist con-  
16 sumers in making purchasing deci-  
17 sions.”; and

18 (2) by adding at the end the following:

19 “(6) AUTHORITY TO INCLUDE ADDITIONAL  
20 PRODUCT CATEGORIES.—The Commission may re-  
21 quire labeling in accordance with this subsection for  
22 any consumer product not specified in this sub-  
23 section or section 322 if the Commission determines  
24 that labeling for the product is likely to assist con-  
25 sumers in making purchasing decisions.”.

1 (b) CONTENT OF LABEL.—Section 324(c) of the En-  
 2 ergy Policy and Conservation Act (42 U.S.C. 6924(c)) is  
 3 amended by adding at the end the following:

4 “(9) DISCRETIONARY APPLICATION.—The Com-  
 5 mission may apply paragraphs (1), (2), (3), (5), and  
 6 (6) of this subsection to the labeling of any product  
 7 covered by paragraph (2)(H) or (6) of subsection  
 8 (a).”.

9 **SEC. 227. RESIDENTIAL BOILER EFFICIENCY STANDARDS.**

10 Section 325(f) of the Energy Policy and Conservation  
 11 Act (42 U.S.C. 6295(f)) is amended—

12 (1) by redesignating paragraph (3) as para-  
 13 graph (4); and

14 (2) by inserting after paragraph (2) the fol-  
 15 lowing:

16 “(3) BOILERS.—

17 “(A) IN GENERAL.—Subject to subpara-  
 18 graphs (B) and (C), boilers manufactured on or  
 19 after September 1, 2012, shall meet the fol-  
 20 lowing requirements:

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjusting Water Temperature
Gas Steam	80%	No Constant Burning Pilot

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Oil Hot Water	84%	Automatic Means for Adjusting Temperature
Oil Steam	82%	None
Electric Hot Water	None	Automatic Means for Adjusting Temperature
Electric Steam	None	None

1                   “(B) PILOTS.—The manufacturer shall not  
2                   equip gas hot water or steam boilers with con-  
3                   stant-burning pilot lights.

4                   “(C) AUTOMATIC MEANS FOR ADJUSTING  
5                   WATER TEMPERATURE.—

6                   “(i) IN GENERAL.—The manufacturer  
7                   shall equip each gas, oil, and electric hot  
8                   water boiler (other than a boiler equipped  
9                   with tankless domestic water heating coils)  
10                  with an automatic means for adjusting the  
11                  temperature of the water supplied by the  
12                  boiler to ensure that an incremental  
13                  change in inferred heat load produces a  
14                  corresponding incremental change in the  
15                  temperature of water supplied.

16                  “(ii) CERTAIN BOILERS.—For a boiler  
17                  that fires at 1 input rate, the requirements  
18                  of this subparagraph may be satisfied by  
19                  providing an automatic means that allows

1 the burner or heating element to fire only  
2 when the means has determined that the  
3 inferred heat load cannot be met by the re-  
4 sidual heat of the water in the system.

5 “(iii) NO INFERRED HEAT LOAD.—  
6 When there is no inferred heat load with  
7 respect to a hot water boiler, the automatic  
8 means described in clauses (i) and (ii)  
9 shall limit the temperature of the water in  
10 the boiler to not more than 140 degrees  
11 Fahrenheit.

12 “(iv) OPERATION.—A boiler described  
13 in clause (i) or (ii) shall be operable only  
14 when the automatic means described in  
15 clauses (i), (ii), and (iii) is installed.”.

16 **SEC. 228. TECHNICAL CORRECTIONS.**

17 (a) DEFINITION OF FLUORESCENT LAMP.—Section  
18 321(30)(B)(viii) of the Energy Policy and Conservation  
19 Act (42 U.S.C. 6291(30)(B)(viii)) is amended by striking  
20 “82” and inserting “87”.

21 (b) STANDARDS FOR COMMERCIAL PACKAGE AIR  
22 CONDITIONING AND HEATING EQUIPMENT.—Section  
23 342(a)(1) of the Energy Policy and Conservation Act (42  
24 U.S.C. 6313(a)(1)) is amended in the matter preceding



1 subparagraph (A) by striking “but before January 1,  
2 2010,”.

3 (c) MERCURY VAPOR LAMP BALLASTS.—

4 (1) DEFINITIONS.—Section 321 of the Energy  
5 Policy and Conservation Act (42 U.S.C. 6291) (as  
6 amended by section 212(a)(2)) is amended—

7 (A) in paragraph (46)(A)—

8 (i) in clause (i), by striking “bulb”  
9 and inserting “the arc tube”; and

10 (ii) in clause (ii), by striking “has a  
11 bulb” and inserting “wall loading is”;

12 (B) in paragraph (47)(A), by striking “op-  
13 erating at a partial” and inserting “typically  
14 operating at a partial vapor”;

15 (C) in paragraph (48), by inserting “in-  
16 tended for general illumination” after “lamps”;  
17 and

18 (D) by adding at the end the following:

19 “(56) The term ‘specialty application mercury  
20 vapor lamp ballast’ means a mercury vapor lamp  
21 ballast that—

22 “(A) is designed and marketed for medical  
23 use, optical comparators, quality inspection, in-  
24 dustrial processing, or scientific use, including  
25 fluorescent microscopy, ultraviolet curing, and

1 the manufacture of microchips, liquid crystal  
2 displays, and printed circuit boards; and

3 “(B) in the case of a specialty application  
4 mercury vapor lamp ballast, is labeled as a spe-  
5 cialty application mercury vapor lamp ballast.”.

6 (2) STANDARD SETTING AUTHORITY.—Section  
7 325(ee) of the Energy Policy and Conservation Act  
8 (42 U.S.C. 6295(ee)) is amended by inserting  
9 “(other than specialty application mercury vapor  
10 lamp ballasts)” after “ballasts”.

11 **SEC. 229. ELECTRIC MOTOR EFFICIENCY STANDARDS.**

12 (a) DEFINITIONS.—Section 340(13) of the Energy  
13 Policy and Conservation Act (42 U.S.C. 6311(13)) is  
14 amended by striking subparagraph (A) and inserting the  
15 following:

16 “(A)(i) The term ‘electric motor’ means—

17 “(I) a general purpose electric motor—  
18 subtype I; and

19 “(II) a general purpose electric motor—  
20 subtype II.

21 “(ii) The term ‘general purpose electric  
22 motor—subtype I’ means any motor that is consid-  
23 ered a general purpose motor under section 431.12  
24 of title 10, Code of Federal Regulations (or suc-  
25 cessor regulations).

1           “(iii) The term ‘general purpose electric  
2           motor—subtype II’ means a motor that, in addition  
3           to the design elements for a general purpose electric  
4           motor—subtype I, incorporates the design elements  
5           (as established in National Electrical Manufacturers  
6           Association MG–1 (2006)) for any of the following:

7                   “(I) A U–Frame Motor.

8                   “(II) A Design C Motor.

9                   “(III) A close-coupled pump motor.

10                  “(IV) A footless motor.

11                  “(V) A vertical solid shaft normal thrust  
12                  (tested in a horizontal configuration).

13                  “(VI) An 8-pole motor.

14                  “(VII) A poly-phase motor with voltage of  
15                  not more than 600 volts (other than 230 or 460  
16                  volts).”.

17           (b) STANDARDS.—Section 342(b) of the Energy Pol-  
18           icy and Conservation Act (42 U.S.C. 6313(13)) is amend-  
19           ed by striking paragraph (1) and inserting the following:

20                   “(1) STANDARDS.—

21                   “(A) GENERAL PURPOSE ELECTRIC MO-  
22                   TORS—SUBTYPE I.—

23                           “(i) IN GENERAL.—Except as other-  
24                           wise provided in this subparagraph, a gen-  
25                           eral purpose electric motor—subtype I

1 with a power rating of not less than 1, and  
2 not more than 200, horsepower manufac-  
3 tured (alone or as a component of another  
4 piece of equipment) after the 3-year period  
5 beginning on the date of enactment of this  
6 subparagraph, shall have a nominal full  
7 load efficiency established in Table 12–12  
8 of National Electrical Manufacturers Asso-  
9 ciation (referred to in this paragraph as  
10 ‘NEMA’) MG–1 (2006).

11 “(ii) FIRE PUMP MOTORS.—A fire  
12 pump motor shall have a nominal full load  
13 efficiency established in Table 12–11 of  
14 NEMA MG–1 (2006).

15 “(B) GENERAL PURPOSE ELECTRIC MO-  
16 TORS—SUBTYPE II.—A general purpose electric  
17 motor—subtype II with a power rating of not  
18 less than 1, and not more than 200, horsepower  
19 manufactured (alone or as a component of an-  
20 other piece of equipment) after the 3-year pe-  
21 riod beginning on the date of enactment of this  
22 subparagraph, shall have a nominal full load ef-  
23 ficiency established in Table 12–11 of NEMA  
24 MG–1 (2006).

1                   “(C) DESIGN B, GENERAL PURPOSE ELEC-  
2                   TRIC MOTORS.—A NEMA Design B, general  
3                   purpose electric motor with a power rating of  
4                   not less than 201, and not more than 500,  
5                   horsepower manufactured (alone or as a compo-  
6                   nent of another piece of equipment) after the 3-  
7                   year period beginning on the date of the enact-  
8                   ment of this subparagraph shall have a nominal  
9                   full load efficiency established in Table 12–11  
10                  of NEMA MG–1 (2006).”.

11           (c) EFFECTIVE DATE.—The amendments made by  
12 this section take effect on the date that is 3 years after  
13 the date of enactment of this Act.

14   **SEC. 230. ENERGY STANDARDS FOR HOME APPLIANCES.**

15           (a) DEFINITION OF ENERGY CONSERVATION STAND-  
16 ARD.—Section 321(6)(A) of the Energy Policy and Con-  
17 servation Act (42 U.S.C. 6291(6)(A)) is amended by strik-  
18 ing “or, in the case of” and inserting “and, in the case  
19 of residential clothes washers, residential dishwashers,”.

20           (b) REFRIGERATORS, REFRIGERATOR-FREEZERS,  
21 AND FREEZERS.—Section 325(b) of the Energy Policy  
22 and Conservation Act (42 U.S.C. 6295(b)) is amended by  
23 adding at the end the following:

24                   “(4) REFRIGERATORS, REFRIGERATOR-FREEZ-  
25                   ERS, AND FREEZERS MANUFACTURED ON OR AFTER

1       JANUARY 1, 2014.—Not later than December 31,  
2       2010, the Secretary shall publish a final rule deter-  
3       mining whether to amend the standards in effect for  
4       refrigerators, refrigerator-freezers, and freezers  
5       manufactured on or after January 1, 2014, and in-  
6       cluding any amended standards.”.

7       (c) RESIDENTIAL CLOTHES WASHERS AND DISH-  
8       WASHERS.—Section 325(g)(4) of the Energy Policy and  
9       Conservation Act (42 U.S.C. 6295(g)(4)) is amended by  
10      adding at the end the following:

11               “(D) CLOTHES WASHERS.—

12                   “(i) CLOTHES WASHERS MANUFAC-  
13                   TURED ON OR AFTER JANUARY 1, 2011.—  
14                   A residential clothes washer manufactured  
15                   on or after January 1, 2011, shall have—

16                           “(I) a modified energy factor of  
17                           at least 1.26; and

18                           “(II) a water factor of not more  
19                           than 9.5.

20                   “(ii) CLOTHES WASHERS MANUFAC-  
21                   TURED ON OR AFTER JANUARY 1, 2015.—  
22                   Not later than January 1, 2015, the Sec-  
23                   retary shall publish a final rule deter-  
24                   mining whether to amend the standards in  
25                   effect for residential clothes washers manu-

1 factured on or after January 1, 2015, and  
2 including any amended standards.

3 “(E) DISHWASHERS.—

4 “(i) DISHWASHERS MANUFACTURED  
5 ON OR AFTER JANUARY 1, 2010.—A dish-  
6 washer manufactured on or after January  
7 1, 2010, shall use not more than—

8 “(I) in the case of a standard-  
9 size dishwasher, 355 kWh per year or  
10 6.5 gallons of water per cycle; and

11 “(II) in the case of a compact-  
12 size dishwasher, 260 kWh per year or  
13 4.5 gallons of water per cycle.

14 “(ii) DISHWASHERS MANUFACTURED  
15 ON OR AFTER JANUARY 1, 2018.—Not later  
16 than January 1, 2015, the Secretary shall  
17 publish a final rule determining whether to  
18 amend the standards for dishwashers man-  
19 ufactured on or after January 1, 2018,  
20 and including any amended standards.”.

21 (d) DEHUMIDIFIERS.—Section 325(cc) of the Energy  
22 Policy and Conservation Act (42 U.S.C. 6295(cc)) is  
23 amended—

24 (1) in paragraph (1), by inserting “and before  
25 October 1, 2012,” after “2007,”; and

1           (2) by striking paragraph (2) and inserting the  
2           following:  
3           “(2) DEHUMIDIFIERS MANUFACTURED ON OR  
4           AFTER OCTOBER 1, 2012.—Dehumidifiers manufac-  
5           tured on or after October 1, 2012, shall have an En-  
6           ergy Factor that meets or exceeds the following val-  
7           ues:

Product Capacity (pints/day):	Minimum Energy Fac- tor liters/ kWh
Up to 35.00 .....	1.35
35.01–45.00 .....	1.50
45.01–54.00 .....	1.60
54.01–75.00 .....	1.70
Greater than 75.00 .....	2.5.”.

8           (e) ENERGY STAR PROGRAM.—Section 324A(d)(2) of  
9           the Energy Policy and Conservation Act (42 U.S.C.  
10          6294a(d)(2)) is amended by striking “2010” and inserting  
11          “2009”.

12   **SEC. 231. IMPROVED ENERGY EFFICIENCY FOR APPLI-**  
13                                   **ANCES AND BUILDINGS IN COLD CLIMATES.**

14          (a) RESEARCH.—Section 911(a)(2) of the Energy  
15          Policy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended—

16               (1) in subparagraph (C), by striking “and” at  
17               the end;

18               (2) in subparagraph (D), by striking the period  
19               at the end and inserting “; and”; and

20               (3) by adding at the end the following:



1 “(E) technologies to improve the energy ef-  
2 ficiency of appliances and mechanical systems  
3 for buildings in cold climates, including com-  
4 bined heat and power units and increased use  
5 of renewable resources, including fuel.”.

6 (b) REBATES.—Section 124 of the Energy Policy Act  
7 of 2005 (42 U.S.C. 15821) is amended—

8 (1) in subsection (b)(1), by inserting “, or prod-  
9 ucts with improved energy efficiency in cold cli-  
10 mates,” after “residential Energy Star products”;  
11 and

12 (2) in subsection (e), by inserting “or product  
13 with improved energy efficiency in a cold climate”  
14 after “residential Energy Star product” each place  
15 it appears.

16 **SEC. 232. DEPLOYMENT OF NEW TECHNOLOGIES FOR**  
17 **HIGH-EFFICIENCY CONSUMER PRODUCTS.**

18 (a) DEFINITIONS.—In this section:

19 (1) ENERGY SAVINGS.—The term “energy sav-  
20 ings” means megawatt-hours of electricity or million  
21 British thermal units of natural gas saved by a  
22 product, in comparison to projected energy consump-  
23 tion under the energy efficiency standard applicable  
24 to the product.

1           (2) HIGH-EFFICIENCY CONSUMER PRODUCT.—

2           The term “high-efficiency consumer product” means  
3           a product that exceeds the energy efficiency of com-  
4           parable products available in the market by a per-  
5           centage determined by the Secretary to be an appro-  
6           priate benchmark for the consumer product category  
7           competing for an award under this section.

8           (b) FINANCIAL INCENTIVES PROGRAM.—Effective  
9           beginning October 1, 2007, the Secretary shall competi-  
10          tively award financial incentives under this section for the  
11          manufacture of high-efficiency consumer products.

12          (c) REQUIREMENTS.—

13               (1) IN GENERAL.—The Secretary shall make  
14               awards under this section to manufacturers of high-  
15               efficiency consumer products, based on the bid of  
16               each manufacturer in terms of dollars per megawatt-  
17               hour or million British thermal units saved.

18               (2) ACCEPTANCE OF BIDS.—In making awards  
19               under this section, the Secretary shall—

20                       (A) solicit bids for reverse auction from  
21                       appropriate manufacturers, as determined by  
22                       the Secretary; and

23                       (B) award financial incentives to the man-  
24                       ufacturers that submit the lowest bids that

1 meet the requirements established by the Sec-  
2 retary.

3 (d) FORMS OF AWARDS.—An award for a high-effi-  
4 ciency consumer product under this section shall be in the  
5 form of a lump sum payment in an amount equal to the  
6 product obtained by multiplying—

7 (1) the amount of the bid by the manufacturer  
8 of the high-efficiency consumer product; and

9 (2) the energy savings during the projected use-  
10 ful life of the high-efficiency consumer product, not  
11 to exceed 10 years, as determined under regulations  
12 issued by the Secretary.

13 **SEC. 233. INDUSTRIAL EFFICIENCY PROGRAM.**

14 (a) DEFINITIONS.—In this section:

15 (1) ELIGIBLE ENTITY.—The term eligible entity  
16 means—

17 (A) an institution of higher education  
18 under contract or in partnership with a non-  
19 profit or for-profit private entity acting on be-  
20 half of an industrial or commercial sector or  
21 subsector;

22 (B) a nonprofit or for-profit private entity  
23 acting on behalf on an industrial or commercial  
24 sector or subsector; or

1 (C) a consortia of entities acting on behalf  
2 of an industrial or commercial sector or sub-  
3 sector.

4 (2) ENERGY-INTENSIVE COMMERCIAL APPLICA-  
5 TIONS.—The term “energy-intensive commercial ap-  
6 plications” means processes and facilities that use  
7 significant quantities of energy as part of the pri-  
8 mary economic activities of the processes and facili-  
9 ties, including—

10 (A) information technology data centers;

11 (B) product manufacturing; and

12 (C) food processing.

13 (3) FEEDSTOCK.—The term “feedstock” means  
14 the raw material supplied for use in manufacturing,  
15 chemical, and biological processes.

16 (4) MATERIALS MANUFACTURERS.—The term  
17 “materials manufacturers” means the energy-inten-  
18 sive primary manufacturing industries, including the  
19 aluminum, chemicals, forest and paper products,  
20 glass, metal casting, and steel industries.

21 (5) PARTNERSHIP.—The term “partnership”  
22 means an energy efficiency and utilization partner-  
23 ship established under subsection (c)(1)(A).

1           (6) PROGRAM.—The term “program” means  
2           the industrial efficiency program established under  
3           subsection (b).

4           (b) ESTABLISHMENT OF PROGRAM.—The Secretary  
5           shall establish a program under which the Secretary, in  
6           cooperation with materials manufacturers, companies en-  
7           gaged in energy-intensive commercial applications, and  
8           national industry trade associations representing the man-  
9           ufactures and companies, shall support, develop, and pro-  
10          mote the use of new materials manufacturing and indus-  
11          trial and commercial processes, technologies, and tech-  
12          niques to optimize energy efficiency and the economic  
13          competitiveness of the United States.

14          (c) PARTNERSHIPS.—

15               (1) IN GENERAL.—As part of the program, the  
16          Secretary shall—

17                       (A) establish energy efficiency and utiliza-  
18                       tion partnerships between the Secretary and eli-  
19                       gible entities to conduct research on, develop,  
20                       and demonstrate new processes, technologies,  
21                       and operating practices and techniques to sig-  
22                       nificantly improve energy efficiency and utiliza-  
23                       tion by materials manufacturers and in energy-  
24                       intensive commercial applications, including the  
25                       conduct of activities to—

1 (i) increase the energy efficiency of in-  
2 dustrial and commercial processes and fa-  
3 cilities in energy-intensive commercial ap-  
4 plication sectors;

5 (ii) research, develop, and dem-  
6 onstrate advanced technologies capable of  
7 energy intensity reductions and increased  
8 environmental performance in energy-in-  
9 tensive commercial application sectors; and

10 (iii) promote the use of the processes,  
11 technologies, and techniques described in  
12 clauses (i) and (ii); and

13 (B) pay the Federal share of the cost of  
14 any eligible partnership activities for which a  
15 proposal has been submitted and approved in  
16 accordance with paragraph (3)(B).

17 (2) ELIGIBLE ACTIVITIES.—Partnership activi-  
18 ties eligible for financial assistance under this sub-  
19 section include—

20 (A) feedstock and recycling research, devel-  
21 opment, and demonstration activities to identify  
22 and promote—

23 (i) opportunities for meeting manufac-  
24 turing feedstock requirements with more

1 energy efficient and flexible sources of  
2 feedstock or energy supply;

3 (ii) strategies to develop and deploy  
4 technologies that improve the quality and  
5 quantity of feedstocks recovered from proc-  
6 ess and waste streams; and

7 (iii) other methods using recycling,  
8 reuse, and improved industrial materials;

9 (B) industrial and commercial energy effi-  
10 ciency and sustainability assessments to—

11 (i) assist individual industrial and  
12 commercial sectors in developing tools,  
13 techniques, and methodologies to assess—

14 (I) the unique processes and fa-  
15 cilities of the sectors;

16 (II) the energy utilization re-  
17 quirements of the sectors; and

18 (III) the application of new, more  
19 energy efficient technologies; and

20 (ii) conduct energy savings assess-  
21 ments;

22 (C) the incorporation of technologies and  
23 innovations that would significantly improve the  
24 energy efficiency and utilization of energy-inten-  
25 sive commercial applications; and

1 (D) any other activities that the Secretary  
2 determines to be appropriate.

3 (3) PROPOSALS.—

4 (A) IN GENERAL.—To be eligible for finan-  
5 cial assistance under this subsection, a partner-  
6 ship shall submit to the Secretary a proposal  
7 that describes the proposed research, develop-  
8 ment, or demonstration activity to be conducted  
9 by the partnership.

10 (B) REVIEW.—After reviewing the sci-  
11 entific, technical, and commercial merit of a  
12 proposals submitted under subparagraph (A),  
13 the Secretary shall approve or disapprove the  
14 proposal.

15 (C) COMPETITIVE AWARDS.—The provision  
16 of financial assistance under this subsection  
17 shall be on a competitive basis.

18 (4) COST-SHARING REQUIREMENT.—In carrying  
19 out this section, the Secretary shall require cost  
20 sharing in accordance with section 988 of the En-  
21 ergy Policy Act of 2005 (42 U.S.C. 16352).

22 (d) AUTHORIZATION OF APPROPRIATIONS.—

23 (1) IN GENERAL.—There are authorized to be  
24 appropriated to the Secretary to carry out this  
25 section—



1 (A) \$184,000,000 for fiscal year 2008;  
2 (B) \$190,000,000 for fiscal year 2009;  
3 (C) \$196,000,000 for fiscal year 2010;  
4 (D) \$202,000,000 for fiscal year 2011;  
5 (E) \$208,000,000 for fiscal year 2012; and  
6 (F) such sums as are necessary for fiscal  
7 year 2013 and each fiscal year thereafter.

8 (2) PARTNERSHIP ACTIVITIES.—Of the  
9 amounts made available under paragraph (1), not  
10 less than 50 percent shall be used to pay the Fed-  
11 eral share of partnership activities under subsection  
12 (c).

13 **Subtitle C—Promoting High Effi-**  
14 **ciency Vehicles, Advanced Bat-**  
15 **teries, and Energy Storage**

16 **SEC. 241. LIGHTWEIGHT MATERIALS RESEARCH AND DE-**  
17 **VELOPMENT.**

18 (a) IN GENERAL.—As soon as practicable after the  
19 date of enactment of this Act, the Secretary shall establish  
20 a research and development program to determine ways  
21 in which—

22 (1) the weight of vehicles may be reduced to im-  
23 prove fuel efficiency without compromising pas-  
24 senger safety; and

1           (2) the cost of lightweight materials (such as  
2       steel alloys, fiberglass, and carbon composites) re-  
3       quired for the construction of lighter-weight vehicles  
4       may be reduced.

5       (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
6       authorized to be appropriated to carry out this section  
7       \$60,000,000 for each of fiscal years 2007 through 2012.

8       **SEC. 242. LOAN GUARANTEES FOR FUEL-EFFICIENT AUTO-**  
9                               **MOBILE PARTS MANUFACTURERS.**

10       (a) IN GENERAL.—Section 712(a) of the Energy Pol-  
11       icy Act of 2005 (42 U.S.C. 16062(a)) is amended in the  
12       second sentence by striking “grants to automobile manu-  
13       facturers” and inserting “grants and loan guarantees  
14       under section 1703 to automobile manufacturers and sup-  
15       pliers”.

16       (b) CONFORMING AMENDMENT.—Section 1703(b) of  
17       the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is  
18       amended by striking paragraph (8) and inserting the fol-  
19       lowing:

20               “(8) Production facilities for the manufacture  
21       of fuel efficient vehicles or parts of those vehicles,  
22       including electric drive vehicles and advanced diesel  
23       vehicles.”.

1 **SEC. 243. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**  
2 **TURING INCENTIVE PROGRAM.**

3 (a) DEFINITIONS.—In this section:

4 (1) ADJUSTED AVERAGE FUEL ECONOMY.—The  
5 term “adjusted average fuel economy” means the av-  
6 erage fuel economy of a manufacturer for all light  
7 duty vehicles produced by the manufacturer, ad-  
8 justed such that the fuel economy of each vehicle  
9 that qualifies for an award shall be considered to be  
10 equal to the average fuel economy for vehicles of a  
11 similar footprint for model year 2005.

12 (2) ADVANCED TECHNOLOGY VEHICLE.—The  
13 term “advanced technology vehicle” means a light  
14 duty vehicle that meets—

15 (A) the Bin 5 Tier II emission standard  
16 established in regulations issued by the Admin-  
17 istrator of the Environmental Protection Agen-  
18 cy under section 202(i) of the Clean Air Act  
19 (42 U.S.C. 7521(i)), or a lower-numbered Bin  
20 emission standard;

21 (B) any new emission standard for fine  
22 particulate matter prescribed by the Adminis-  
23 trator under that Act (42 U.S.C. 7401 et seq.);  
24 and

25 (C) at least 125 percent of the average  
26 base year combined fuel economy, calculated on

1 an energy-equivalent basis, for vehicles of a  
2 substantially similar footprint.

3 (3) COMBINED FUEL ECONOMY.—The term  
4 “combined fuel economy” means—

5 (A) the combined city/highway miles per  
6 gallon values, as reported in accordance with  
7 section 32908 of title 49, United States Code;  
8 and

9 (B) in the case of an electric drive vehicle  
10 with the ability to recharge from an off-board  
11 source, the reported mileage, as determined in  
12 a manner consistent with the Society of Auto-  
13 motive Engineers recommended practice for  
14 that configuration or a similar practice rec-  
15 ommended by the Secretary, using a petroleum  
16 equivalence factor for the off-board electricity  
17 (as defined in section 474 of title 10, Code of  
18 Federal Regulations).

19 (4) ENGINEERING INTEGRATION COSTS.—The  
20 term “engineering integration costs” includes the  
21 cost of engineering tasks relating to—

22 (A) incorporating qualifying components  
23 into the design of advanced technology vehicles;  
24 and

1 (B) designing new tooling and equipment  
2 and developing new manufacturing processes  
3 and material suppliers for production facilities  
4 that produce qualifying components or ad-  
5 vanced technology vehicles.

6 (5) QUALIFYING COMPONENTS.—The term  
7 “qualifying components” means components that the  
8 Secretary determines to be—

9 (A) specially designed for advanced tech-  
10 nology vehicles; and

11 (B) installed for the purpose of meeting  
12 the performance requirements of advanced tech-  
13 nology vehicles.

14 (b) ADVANCED VEHICLES MANUFACTURING FACIL-  
15 ITY.—The Secretary shall provide facility funding awards  
16 under this section to automobile manufacturers and com-  
17 ponent suppliers to pay not more than 30 percent of the  
18 cost of—

19 (1) reequipping, expanding, or establishing a  
20 manufacturing facility in the United States to  
21 produce—

22 (A) qualifying advanced technology vehi-  
23 cles; or

24 (B) qualifying components; and

1           (2) engineering integration performed in the  
2       United States of qualifying vehicles and qualifying  
3       components.

4       (c) PERIOD OF AVAILABILITY.—An award under sub-  
5       section (b) shall apply to—

6           (1) facilities and equipment placed in service  
7       before December 30, 2017; and

8           (2) engineering integration costs incurred dur-  
9       ing the period beginning on the date of enactment  
10      of this Act and ending on December 30, 2017.

11      (d) IMPROVEMENT.—The Secretary shall issue regu-  
12      lations that require that, in order for an automobile manu-  
13      facturer to be eligible for an award under this section dur-  
14      ing a particular year, the adjusted average fuel economy  
15      of the manufacturer for light duty vehicles produced by  
16      the manufacturer during the most recent year for which  
17      data are available shall be not less than the average fuel  
18      economy for all light duty vehicles of the manufacturer  
19      for model year 2005.

20      (e) SET ASIDE FOR SMALL AUTOMOBILE MANUFAC-  
21      TURERS AND COMPONENT SUPPLIERS.—

22           (1) DEFINITION OF COVERED FIRM.—In this  
23      subsection, the term “covered firm” means a firm  
24      that—

25           (A) employs less than 500 individuals; and

1 (B) manufactures automobiles or compo-  
2 nents of automobiles.

3 (2) SET ASIDE.—Of the amount of funds that  
4 are used to provide awards for each fiscal year  
5 under this section, the Secretary shall use not less  
6 than 30 percent of the amount to provide awards to  
7 covered firms or consortia led by a covered firm.

8 **SEC. 244. ENERGY STORAGE COMPETITIVENESS.**

9 (a) SHORT TITLE.—This section may be cited as the  
10 “United States Energy Storage Competitiveness Act of  
11 2007”.

12 (b) ENERGY STORAGE SYSTEMS FOR MOTOR TRANS-  
13 PORTATION AND ELECTRICITY TRANSMISSION AND DIS-  
14 TRIBUTION.—

15 (1) DEFINITIONS.—In this subsection:

16 (A) COUNCIL.—The term “Council” means  
17 the Energy Storage Advisory Council estab-  
18 lished under paragraph (3).

19 (B) COMPRESSED AIR ENERGY STOR-  
20 AGE.—The term “compressed air energy stor-  
21 age” means, in the case of an electricity grid  
22 application, the storage of energy through the  
23 compression of air.

24 (C) DEPARTMENT.—The term “Depart-  
25 ment” means the Department of Energy.

1 (D) FLYWHEEL.—The term “flywheel”  
2 means, in the case of an electricity grid applica-  
3 tion, a device used to store rotational kinetic  
4 energy.

5 (E) ULTRACAPACITOR.—The term  
6 “ultracapacitor” means an energy storage de-  
7 vice that has a power density comparable to  
8 conventional capacitors but capable of exceeding  
9 the energy density of conventional capacitors by  
10 several orders of magnitude.

11 (2) PROGRAM.—The Secretary shall carry out a  
12 research, development, and demonstration program  
13 to support the ability of the United States to remain  
14 globally competitive in energy storage systems for  
15 motor transportation and electricity transmission  
16 and distribution.

17 (3) ENERGY STORAGE ADVISORY COUNCIL.—

18 (A) ESTABLISHMENT.—Not later than 90  
19 days after the date of enactment of this Act,  
20 the Secretary shall establish an Energy Storage  
21 Advisory Council.

22 (B) COMPOSITION.—

23 (i) IN GENERAL.—Subject to clause  
24 (ii), the Council shall consist of not less  
25 than 15 individuals appointed by the Sec-



1           retary, based on recommendations of the  
2           National Academy of Sciences.

3           (ii) ENERGY STORAGE INDUSTRY.—  
4           The Council shall consist primarily of rep-  
5           resentatives of the energy storage industry  
6           of the United States.

7           (iii) CHAIRPERSON.—The Secretary  
8           shall select a Chairperson for the Council  
9           from among the members appointed under  
10          clause (i).

11          (C) MEETINGS.—

12          (i) IN GENERAL.—The Council shall  
13          meet not less than once a year.

14          (ii) FEDERAL ADVISORY COMMITTEE  
15          ACT.—The Federal Advisory Committee  
16          Act (5 U.S.C. App. 2) shall apply to a  
17          meeting of the Council.

18          (D) PLANS.—No later than 1 year after  
19          the date of enactment of this Act, in conjunc-  
20          tion with the Secretary, the Council shall de-  
21          velop 5-year plans for integrating basic and ap-  
22          plied research so that the United States retains  
23          a globally competitive domestic energy storage  
24          industry for motor transportation and elec-  
25          tricity transmission and distribution.

1 (E) REVIEW.—The Council shall—

2 (i) assess the performance of the De-  
3 partment in meeting the goals of the plans  
4 developed under subparagraph (D); and

5 (ii) make specific recommendations to  
6 the Secretary on programs or activities  
7 that should be established or terminated to  
8 meet those goals.

9 (4) BASIC RESEARCH PROGRAM.—

10 (A) BASIC RESEARCH.—The Secretary  
11 shall conduct a basic research program on en-  
12 ergy storage systems to support motor trans-  
13 portation and electricity transmission and dis-  
14 tribution, including—

15 (i) materials design;

16 (ii) materials synthesis and character-  
17 ization;

18 (iii) electrode-active materials, includ-  
19 ing electrolytes and bioelectrolytes;

20 (iv) surface and interface dynamics;

21 (v) modeling and simulation; and

22 (vi) thermal behavior and life deg-  
23 radation mechanisms; and

24 (vii) thermal behavior and life deg-  
25 radation mechanisms.

1 (B) NANOSCIENCE CENTERS.—The Sec-  
2 retary, in cooperation with the Council, shall co-  
3 ordinate the activities of the nanoscience cen-  
4 ters of the Department to help the nanoscience  
5 centers of the Department maintain a globally  
6 competitive posture in energy storage systems  
7 for motor transportation and electricity trans-  
8 mission and distribution.

9 (5) APPLIED RESEARCH PROGRAM.—The Sec-  
10 retary shall conduct an applied research program on  
11 energy storage systems to support motor transpor-  
12 tation and electricity transmission and distribution  
13 technologies, including—

- 14 (A) ultracapacitors;
- 15 (B) flywheels;
- 16 (C) batteries and battery systems (includ-  
17 ing flow batteries);
- 18 (D) compressed air energy systems;
- 19 (E) power conditioning electronics;
- 20 (F) manufacturing technologies for energy  
21 storage systems; and
- 22 (G) thermal management systems.

23 (6) ENERGY STORAGE RESEARCH CENTERS.—

24 (A) IN GENERAL.—The Secretary shall es-  
25 tablish, through competitive bids, not more than

1 4 energy storage research centers to translate  
2 basic research into applied technologies to ad-  
3 vance the capability of the United States to  
4 maintain a globally competitive posture in en-  
5 ergy storage systems for motor transportation  
6 and electricity transmission and distribution.

7 (B) PROGRAM MANAGEMENT.—The centers  
8 shall be jointly managed by the Under Sec-  
9 retary for Science of the Department.

10 (C) PARTICIPATION AGREEMENTS.—As a  
11 condition of participating in a center, a partici-  
12 pant shall enter into a participation agreement  
13 with the center that requires that activities con-  
14 ducted by the participant for the center pro-  
15 mote the goal of enabling the United States to  
16 compete successfully in global energy storage  
17 markets.

18 (D) PLANS.—A center shall conduct activi-  
19 ties that promote the achievement of the goals  
20 of the plans of the Council under paragraph  
21 (3)(D).

22 (E) COST SHARING.—In carrying out this  
23 paragraph, the Secretary shall require cost-  
24 sharing in accordance with section 988 of the  
25 Energy Policy Act of 2005 (42 U.S.C. 16352).

1 (F) NATIONAL LABORATORIES.—A na-  
2 tional laboratory (as defined in section 2 of the  
3 Energy Policy Act of 2005 (42 U.S.C. 15801))  
4 may participate in a center established under  
5 this paragraph, including a cooperative research  
6 and development agreement (as defined in sec-  
7 tion 12(d) of the Stevenson-Wydler Technology  
8 Innovation Act of 1980 (15 U.S.C. 3710a(d))).

9 (7) DISCLOSURE.—Section 623 of the Energy  
10 Policy Act of 1992 (42 U.S.C. 13293) may apply to  
11 any project carried out through a grant, contract, or  
12 cooperative agreement under this section.

13 (8) INTELLECTUAL PROPERTY.—In accordance  
14 with section 202(a)(ii) of title 35, United States  
15 Code, section 152 of the Atomic Energy Act of 1954  
16 (42 U.S.C. 2182), and section 9 of the Federal Non-  
17 nuclear Research and Development Act of 1974 (42  
18 U.S.C. 5908), the Secretary may require, for any  
19 new invention developed under paragraph (6)—

20 (A) that any industrial participant that is  
21 active in a Energy Storage Research Center es-  
22 tablished under paragraph (6) related to the  
23 advancement of energy storage technologies car-  
24 ried out, in whole or in part, with Federal fund-  
25 ing, be granted the first option to negotiate

1 with the invention owner, at least in the field of  
2 energy storage technologies, nonexclusive li-  
3 censes and royalties on terms that are reason-  
4 able, as determined by the Secretary;

5 (B) that, during a 2-year period beginning  
6 on the date on which an invention is made, the  
7 patent holder shall not negotiate any license or  
8 royalty agreement with any entity that is not an  
9 industrial participant under paragraph (6);

10 (C) that, during the 2-year period de-  
11 scribed in subparagraph (B), the patent holder  
12 shall negotiate nonexclusive licenses and royal-  
13 ties in good faith with any interested industrial  
14 participant under paragraph (6); and

15 (D) such other terms as the Secretary de-  
16 termines to be necessary to promote the acceler-  
17 ated commercialization of inventions made  
18 under paragraph (6) to advance the capability  
19 of the United States to successfully compete in  
20 global energy storage markets.

21 (9) REVIEW BY NATIONAL ACADEMY OF  
22 SCIENCES.—Not later than 3 years after the date of  
23 enactment of this Act, the Secretary shall offer to  
24 enter into an arrangement with the National Acad-

1       emy of Sciences to assess the performance of the  
2       Department in carrying out this section.

3           (10) AUTHORIZATION OF APPROPRIATIONS.—

4       There are authorized to be appropriated to carry  
5       out—

6           (A) the basic research program under  
7       paragraph (4) \$50,000,000 for each of fiscal  
8       years 2008 through 2017;

9           (B) the applied research program under  
10      paragraph (5) \$80,000,000 for each of fiscal  
11      years 2008 through 2017; and;

12          (C) the energy storage research center pro-  
13      gram under paragraph (6) \$100,000,000 for  
14      each of fiscal years 2008 through 2017.

15 **SEC. 245. ADVANCED TRANSPORTATION TECHNOLOGY**  
16 **PROGRAM.**

17      (a) ELECTRIC DRIVE VEHICLE DEMONSTRATION  
18      PROGRAM.—

19          (1) DEFINITIONS.—In this subsection—

20           (A) BATTERY.—The term “battery” means  
21      an electrochemical energy storage device pow-  
22      ered directly by electrical current.

23           (B) PLUG-IN ELECTRIC DRIVE VEHICLE.—  
24      The term “plug-in electric drive vehicle” means  
25      a precommercial vehicle that—

1 (i) draws motive power from a battery  
2 with a capacity of at least 4 kilowatt-  
3 hours;

4 (ii) can be recharged from an external  
5 source of electricity for motive power; and

6 (iii) is a light-, medium-, or heavy-  
7 duty onroad or nonroad vehicle.

8 (2) PROGRAM.—The Secretary shall establish a  
9 competitive program to provide grants for dem-  
10 onstrations of plug-in electric drive vehicles.

11 (3) ELIGIBILITY.—

12 (A) IN GENERAL.—A State government,  
13 local government, metropolitan transportation  
14 authority, air pollution control district, private  
15 entity, and nonprofit entity shall be eligible to  
16 receive a grant under this subsection.

17 (B) CERTAIN APPLICANTS.—A battery  
18 manufacturer that proposes to supply to an ap-  
19 plicant for a grant under this section a battery  
20 with a capacity of greater than 1 kilowatt-hour  
21 for use in a plug-in electric drive vehicle shall—

22 (i) ensure that the applicant includes  
23 in the application a description of the price  
24 of the battery per kilowatt-hour;



1 (ii) on approval by the Secretary of  
2 the application, publish, or permit the Sec-  
3 retary to publish, the price described in  
4 clause (i); and

5 (iii) for any order received by the bat-  
6 tery manufacturer for at least 1,000 bat-  
7 teries, offer the batteries at that price.

8 (4) PRIORITY.—In making grants under this  
9 subsection, the Secretary shall give priority to pro-  
10 posals that—

11 (A) are likely to contribute to the commer-  
12 cialization and production of plug-in electric  
13 drive vehicles in the United States; and

14 (B) reduce petroleum usage.

15 (5) SCOPE OF DEMONSTRATIONS.—The Sec-  
16 retary shall ensure, to the extent practicable, that  
17 the program established under this subsection in-  
18 cludes a variety of applications, manufacturers, and  
19 end-uses.

20 (6) REPORTING.—The Secretary shall require a  
21 grant recipient under this subsection to submit to  
22 the Secretary, on an annual basis, data relating to  
23 vehicle, performance, life cycle costs, and emissions  
24 of vehicles demonstrated under the grant, including  
25 emissions of greenhouse gases.

1           (7) COST SHARING.—Section 988 of the Energy  
2       Policy Act of 2005 (42 U.S.C. 16352) shall apply to  
3       a grant made under this subsection.

4           (8) AUTHORIZATIONS OF APPROPRIATIONS.—  
5       There are authorized to be appropriated to carry out  
6       this subsection \$60,000,000 for each of fiscal years  
7       2008 through 2012, of which not less than  
8       \$20,000,000 shall be available each fiscal year only  
9       to make grants local and municipal governments.

10       (b) NEAR-TERM ELECTRIC DRIVE TRANSPORTATION  
11   DEPLOYMENT PROGRAM.—

12           (1) DEFINITION OF QUALIFIED ELECTRIC  
13   TRANSPORTATION PROJECT.—

14           (A) IN GENERAL.—In this subsection, the  
15       term “qualified electric transportation project”  
16       means a project that would simultaneously re-  
17       duce emissions of criteria pollutants, green-  
18       house gas emissions, and petroleum usage by at  
19       least 40 percent as compared to commercially  
20       available, petroleum-based technologies.

21           (B) INCLUSIONS.—In this subsection, the  
22       term “qualified electric transportation project”  
23       includes a project relating to—

24                   (i) shipside or shoreside electrification  
25                   for vessels;

- 1 (ii) truck-stop electrification;
- 2 (iii) electric truck refrigeration units;
- 3 (iv) battery powered auxiliary power
- 4 units for trucks;
- 5 (v) electric airport ground support
- 6 equipment;
- 7 (vi) electric material and cargo han-
- 8 dling equipment;
- 9 (vii) electric or dual-mode electric
- 10 freight rail;
- 11 (viii) any distribution upgrades needed
- 12 to supply electricity to the project; and
- 13 (ix) any ancillary infrastructure, in-
- 14 cluding panel upgrades, battery chargers,
- 15 in-situ transformers, and trenching.

16 (2) ESTABLISHMENT.—Not later than 1 year  
17 after the date of enactment of this Act, the Sec-  
18 retary, in consultation with the Secretary of Trans-  
19 portation and the Administrator of the Environ-  
20 mental Protection Agency, shall establish a program  
21 to provide grants and loans to eligible entities for  
22 the conduct of qualified electric transportation  
23 projects.

24 (3) GRANTS.—

1 (A) IN GENERAL.—Of the amounts made  
2 available for grants under paragraph (2)—

3 (i)  $\frac{2}{3}$  shall be made available by the  
4 Secretary on a competitive basis for quali-  
5 fied electric transportation projects based  
6 on the overall cost-effectiveness of a quali-  
7 fied electric transportation project in re-  
8 ducing emissions of criteria pollutants,  
9 emissions of greenhouse gases, and petro-  
10 leum usage; and

11 (ii)  $\frac{1}{3}$  shall be made available by the  
12 Secretary for qualified electric transpor-  
13 tation projects in the order that the grant  
14 applications are received, if the qualified  
15 electric transportation projects meet the  
16 minimum standard for the reduction of  
17 emissions of criteria pollutants, emissions  
18 of greenhouse gases, and petroleum usage  
19 described in paragraph (1)(A).

20 (B) PRIORITY.—In providing grants under  
21 this paragraph, the Secretary shall give priority  
22 to large-scale projects and large-scale  
23 aggregators of projects.

24 (C) COST SHARING.—Section 988 of the  
25 Energy Policy Act of 2005 (42 U.S.C. 16352)

1 shall apply to a grant made under this para-  
2 graph.

3 (4) REVOLVING LOAN PROGRAM.—

4 (A) IN GENERAL.—The Secretary shall es-  
5 tablish a revolving loan program to provide  
6 loans to eligible entities for the conduct of  
7 qualified electric transportation projects under  
8 paragraph (2).

9 (B) CRITERIA.—The Secretary shall estab-  
10 lish criteria for the provision of loans under this  
11 paragraph.

12 (C) FUNDING.—Of amounts made avail-  
13 able to carry out this subsection, the Secretary  
14 shall use any amounts not used to provide  
15 grants under paragraph (3) to carry out the re-  
16 volving loan program under this paragraph.

17 (c) MARKET ASSESSMENT PROGRAM.—The Adminis-  
18 trator of the Environmental Protection Agency, in con-  
19 sultation with the Secretary and private industry, shall  
20 carry out a program—

21 (1) to inventory and analyze existing electric  
22 drive transportation technologies and hybrid tech-  
23 nologies and markets; and

24 (2) to identify and implement methods of re-  
25 moving barriers for existing and emerging applica-

1        tions of electric drive transportation technologies  
2        and hybrid transportation technologies.

3        (d) ELECTRICITY USAGE PROGRAM.—

4            (1) IN GENERAL.—The Secretary, in consulta-  
5        tion with the Administrator of the Environmental  
6        Protection Agency and private industry, shall carry  
7        out a program—

8            (A) to work with utilities to develop low-  
9        cost, simple methods of—

10            (i) using off-peak electricity; or

11            (ii) managing on-peak electricity use;

12        (B) to develop systems and processes—

13            (i) to enable plug-in electric vehicles  
14        to enhance the availability of emergency  
15        back-up power for consumers;

16            (ii) to study and demonstrate the po-  
17        tential value to the electric grid to use the  
18        energy stored in the on-board storage sys-  
19        tems to improve the efficiency and reli-  
20        ability of the grid generation system; and

21            (iii) to work with utilities and other  
22        interested stakeholders to study and dem-  
23        onstrate the implications of the introduc-  
24        tion of plug-in electric vehicles and other  
25        types of electric transportation on the pro-

1                   duction of electricity from renewable re-  
2                   sources.

3                   (2) OFF-PEAK ELECTRICITY USAGE GRANTS.—

4                   In carrying out the program under paragraph (1),  
5                   the Secretary shall provide grants to assist eligible  
6                   public and private electric utilities for the conduct of  
7                   programs or activities to encourage owners of elec-  
8                   tric drive transportation technologies—

9                   (A) to use off-peak electricity; or

10                  (B) to have the load managed by the util-  
11                  ity.

12                  (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
13                  authorized to be appropriated to carry out subsections (b),  
14                  (c), and (d) \$125,000,000 for each of fiscal years 2008  
15                  through 2013.

16                  (f) ELECTRIC DRIVE TRANSPORTATION TECH-  
17                  NOLOGIES.—

18                  (1) DEFINITIONS.—In this subsection:

19                         (A) BATTERY.—The term “battery” means  
20                         an electrochemical energy storage device pow-  
21                         ered directly by electrical current.

22                         (B) ELECTRIC DRIVE TRANSPORTATION  
23                         TECHNOLOGY.—The term “electric drive trans-  
24                         portation technology” means—

1 (i) technology used in vehicles that  
2 use an electric motor for all or part of the  
3 motive power of the vehicles, including bat-  
4 tery electric, hybrid electric, plug-in hybrid  
5 electric, fuel cell, and plug-in fuel cell vehi-  
6 cles, or rail transportation; or

7 (ii) equipment relating to transpor-  
8 tation or mobile sources of air pollution  
9 that use an electric motor to replace an in-  
10 ternal combustion engine for all or part of  
11 the work of the equipment, including—

12 (I) corded electric equipment  
13 linked to transportation or mobile  
14 sources of air pollution; and

15 (II) electrification technologies at  
16 airports, ports, truck stops, and mate-  
17 rial-handling facilities.

18 (C) ENERGY STORAGE DEVICE.—

19 (i) IN GENERAL.—The term “energy  
20 storage device” means the onboard device  
21 used in an on-road or nonroad vehicle to  
22 store energy, or a battery, ultracapacitor,  
23 compressed air energy storage system, or  
24 flywheel used to store energy in a sta-  
25 tionary application.



1 (ii) INCLUSIONS.—The term “energy  
2 storage device” includes—

3 (I) in the case of an electric or  
4 hybrid electric or fuel cell vehicle, a  
5 battery, ultracapacitor, or similar de-  
6 vice; and

7 (II) in the case of a hybrid hy-  
8 draulic vehicle, an accumulator or  
9 similar device.

10 (D) ENGINE DOMINANT HYBRID VEHI-  
11 CLE.—The term “engine dominant hybrid vehi-  
12 cle” means an on-road or nonroad vehicle  
13 that—

14 (i) is propelled by an internal combus-  
15 tion engine or heat engine using—

16 (I) any combustible fuel; and

17 (II) an on-board, rechargeable  
18 energy storage device; and

19 (ii) has no means of using an off-  
20 board source of energy.

21 (E) NONROAD VEHICLE.—The term  
22 “nonroad vehicle” means a vehicle—

23 (i) powered by—

1 (I) a nonroad engine, as that  
2 term is defined in section 216 of the  
3 Clean Air Act (42 U.S.C. 7550); or

4 (II) fully or partially by an elec-  
5 tric motor powered by a fuel cell, a  
6 battery, or an off-board source of elec-  
7 tricity; and

8 (ii) that is not a motor vehicle or a ve-  
9 hicle used solely for competition.

10 (F) PLUG-IN ELECTRIC DRIVE VEHICLE.—

11 In this section, the term “plug-in electric drive  
12 vehicle” means a precommercial vehicle that—

13 (i) draws motive power from a battery  
14 with a capacity of at least 4 kilowatt-  
15 hours;

16 (ii) can be recharged from an external  
17 source of electricity for motive power; and

18 (iii) is a light-, medium-, or heavy-  
19 duty onroad or nonroad vehicle.

20 (2) EVALUATION OF PLUG-IN ELECTRIC DRIVE  
21 TRANSPORTATION TECHNOLOGY BENEFITS.—

22 (A) IN GENERAL.—The Secretary, in co-  
23 operation with the Administrator of the Envi-  
24 ronmental Protection Agency, the heads of  
25 other appropriate Federal agencies, and appro-

1        priate interested stakeholders, shall evaluate  
2        and, as appropriate, modify existing test proto-  
3        cols for fuel economy and emissions to ensure  
4        that any protocols for electric drive transpor-  
5        tation technologies, including plug-in electric  
6        drive vehicles, accurately measure the fuel econ-  
7        omy and emissions performance of the electric  
8        drive transportation technologies.

9                (B) REQUIREMENTS.—Test protocols (in-  
10        cluding any modifications to test protocols) for  
11        electric drive transportation technologies under  
12        subparagraph (A) shall—

13                (i) be designed to assess the full po-  
14        tential of benefits in terms of reduction of  
15        emissions of criteria pollutants, reduction  
16        of energy use, and petroleum reduction;  
17        and

18                (ii) consider—

19                        (I) the vehicle and fuel as a sys-  
20        tem, not just an engine;

21                        (II) nightly off-board charging,  
22        as applicable; and

23                        (III) different engine-turn on  
24        speed control strategies.

1           (3) PLUG-IN ELECTRIC DRIVE VEHICLE RE-  
2 SEARCH AND DEVELOPMENT.—The Secretary shall  
3 conduct an applied research program for plug-in  
4 electric drive vehicle technology and engine dominant  
5 hybrid vehicle technology, including—

6           (A) high-capacity, high-efficiency energy  
7 storage devices that, as compared to existing  
8 technologies that are in commercial service,  
9 have improved life, energy storage capacity, and  
10 power delivery capacity;

11           (B) high-efficiency on-board and off-board  
12 charging components;

13           (C) high-power and energy-efficient  
14 drivetrain systems for passenger and commer-  
15 cial vehicles and for nonroad vehicles;

16           (D) development and integration of control  
17 systems and power trains for plug-in electric ve-  
18 hicles, plug-in hybrid fuel cell vehicles, and en-  
19 gine dominant hybrid vehicles, including—

20           (i) development of efficient cooling  
21 systems;

22           (ii) analysis and development of con-  
23 trol systems that minimize the emissions  
24 profile in cases in which clean diesel en-

1                   gines are part of a plug-in hybrid drive  
2                   system; and

3                   (iii) development of different control  
4                   systems that optimize for different goals,  
5                   including—

6                   (I) prolonging energy storage de-  
7                   vice life;

8                   (II) reduction of petroleum con-  
9                   sumption; and

10                  (III) reduction of greenhouse gas  
11                  emissions;

12                  (E) application of nanomaterial technology  
13                  to energy storage devices and fuel cell systems;  
14                  and

15                  (F) use of smart vehicle and grid inter-  
16                  connection devices and software that enable  
17                  communications between the grid of the future  
18                  and electric drive transportation technology ve-  
19                  hicles.

20                  (4) EDUCATION PROGRAM.—

21                  (A) IN GENERAL.—The Secretary shall de-  
22                  velop a nationwide electric drive transportation  
23                  technology education program under which the  
24                  Secretary shall provide—

1 (i) teaching materials to secondary  
2 schools and high schools; and

3 (ii) assistance for programs relating  
4 to electric drive system and component en-  
5 gineering to institutions of higher edu-  
6 cation.

7 (B) ELECTRIC VEHICLE COMPETITION.—

8 The program established under subparagraph  
9 (A) shall include a plug-in hybrid electric vehi-  
10 cle competition for institutions of higher edu-  
11 cation, which shall be known as the “Dr. An-  
12 drew Frank Plug-In Electric Vehicle Competi-  
13 tion”.

14 (C) ENGINEERS.—In carrying out the pro-  
15 gram established under subparagraph (A), the  
16 Secretary shall provide financial assistance to  
17 institutions of higher education to create new,  
18 or support existing, degree programs to ensure  
19 the availability of trained electrical and me-  
20 chanical engineers with the skills necessary for  
21 the advancement of—

22 (i) plug-in electric drive vehicles; and

23 (ii) other forms of electric drive trans-  
24 portation technology vehicles.

1 (5) AUTHORIZATION OF APPROPRIATIONS.—

2 There are authorized to be appropriated for each of  
3 fiscal years 2008 through 2013—

4 (A) to carry out paragraph (3)  
5 \$200,000,000; and

6 (B) to carry out paragraph (4)  
7 \$5,000,000.

8 (g) COLLABORATION AND MERIT REVIEW.—

9 (1) COLLABORATION WITH NATIONAL LABORA-  
10 TORIES.—To the maximum extent practicable, Na-  
11 tional Laboratories shall collaborate with the public,  
12 private, and academic sectors and with other Na-  
13 tional Laboratories in the design, conduct, and dis-  
14 semination of the results of programs and activities  
15 authorized under this section.

16 (2) COLLABORATION WITH MOBILE ENERGY  
17 STORAGE PROGRAM.—To the maximum extent prac-  
18 ticable, the Secretary shall seek to coordinate the  
19 stationary and mobile energy storage programs of  
20 the Department of the Energy with the programs  
21 and activities authorized under this section

22 (3) MERIT REVIEW.—Notwithstanding section  
23 989 of the Energy Policy Act of 2005 (42 U.S.C.  
24 16353), of the amounts made available to carry out

1       this section, not more than 30 percent shall be pro-  
2       vided to National Laboratories.

3   **SEC. 246. INCLUSION OF ELECTRIC DRIVE IN ENERGY POL-**  
4                   **ICY ACT OF 1992.**

5       Section 508 of the Energy Policy Act of 1992 (42  
6   U.S.C. 13258) is amended—

7           (1) by redesignating subsections (a) through (d)  
8       as subsections (b) through (e), respectively;

9           (2) by inserting before subsection (b) the fol-  
10      lowing:

11      “(a) DEFINITIONS.—In this section:

12           “(1) FUEL CELL ELECTRIC VEHICLE.—The  
13      term ‘fuel cell electric vehicle’ means an on-road or  
14      nonroad vehicle that uses a fuel cell (as defined in  
15      section 803 of the Spark M. Matsunaga Hydrogen  
16      Act of 2005 (42 U.S.C. 16152)).

17           “(2) HYBRID ELECTRIC VEHICLE.—The term  
18      ‘hybrid electric vehicle’ means a new qualified hybrid  
19      motor vehicle (as defined in section 30B(d)(3) of the  
20      Internal Revenue Code of 1986).

21           “(3) MEDIUM- OR HEAVY-DUTY ELECTRIC VE-  
22      HICLE.—The term ‘medium- or heavy-duty electric  
23      vehicle’ means an electric, hybrid electric, or plug-in  
24      hybrid electric vehicle with a gross vehicle weight of  
25      more than 8,501 pounds.



1           “(4) NEIGHBORHOOD ELECTRIC VEHICLE.—

2           The term ‘neighborhood electric vehicle’ means a 4-  
3           wheeled on-road or nonroad vehicle that—

4                   “(A) has a top attainable speed in 1 mile  
5                   of more than 20 mph and not more than 25  
6                   mph on a paved level surface; and

7                   “(B) is propelled by an electric motor and  
8                   on-board, rechargeable energy storage system  
9                   that is rechargeable using an off-board source  
10                  of electricity.

11           “(5) PLUG-IN HYBRID ELECTRIC VEHICLE.—

12           The term ‘plug-in hybrid electric vehicle’ means a  
13           light-duty, medium-duty, or heavy-duty on-road or  
14           nonroad vehicle that is propelled by any combination  
15           of—

16                   “(A) an electric motor and on-board, re-  
17                   chargeable energy storage system capable of op-  
18                   erating the vehicle in intermittent or continuous  
19                   all-electric mode and which is rechargeable  
20                   using an off-board source of electricity; and

21                   “(B) an internal combustion engine or  
22                   heat engine using any combustible fuel.”;

23           (3) in subsection (b) (as redesignated by para-  
24           graph (1))—

1 (A) by striking “The Secretary” and in-  
2 serting the following:

3 “(1) ALLOCATION.—The Secretary”; and

4 (B) by adding at the end the following:

5 “(2) ELECTRIC VEHICLES.—Not later than  
6 January 31, 2009, the Secretary shall—

7 “(A) allocate credit in an amount to be de-  
8 termined by the Secretary for—

9 “(i) acquisition of—

10 “(I) a hybrid electric vehicle;

11 “(II) a plug-in hybrid electric ve-  
12 hicle;

13 “(III) a fuel cell electric vehicle;

14 “(IV) a neighborhood electric ve-  
15 hicle; or

16 “(V) a medium- or heavy-duty  
17 electric vehicle; and

18 “(ii) investment in qualified alter-  
19 native fuel infrastructure or nonroad  
20 equipment, as determined by the Sec-  
21 retary; and

22 “(B) allocate more than 1, but not to ex-  
23 ceed 5, credits for investment in an emerging  
24 technology relating to any vehicle described in  
25 subparagraph (A) to encourage—

1 “(i) a reduction in petroleum demand;  
2 “(ii) technological advancement; and  
3 “(iii) a reduction in vehicle emis-  
4 sions.”;

5 (4) in subsection (c) (as redesignated by para-  
6 graph (1)), by striking “subsection (a)” and insert-  
7 ing “subsection (b)”; and

8 (5) by adding at the end the following:

9 “(e) AUTHORIZATION OF APPROPRIATIONS.—There  
10 are authorized to be appropriated such sums as are nec-  
11 essary to carry out this section for each of fiscal years  
12 2008 through 2013.”.

13 **SEC. 247. COMMERCIAL INSULATION DEMONSTRATION**  
14 **PROGRAM.**

15 (a) DEFINITIONS.—In this section:

16 (1) ADVANCED INSULATION.—The term “ad-  
17 vanced insulation” means insulation that has an R  
18 value of not less than R35 per inch.

19 (2) COVERED REFRIGERATION UNIT.—The  
20 term “covered refrigeration unit” means any—

21 (A) commercial refrigerated truck;  
22 (B) commercial refrigerated trailer; and  
23 (C) commercial refrigerator, freezer, or re-  
24 frigerator-freezer described in section 342(c) of

1           the Energy Policy and Conservation Act (42  
2           U.S.C. 6313(c)).

3           (b) REPORT.—Not later than 90 days after the date  
4 of enactment of this Act, the Secretary shall submit to  
5 Congress a report that includes an evaluation of—

6           (1) the state of technological advancement of  
7           advanced insulation; and

8           (2) the projected amount of cost savings that  
9           would be generated by implementing advanced insu-  
10          lation into covered refrigeration units.

11          (c) DEMONSTRATION PROGRAM.—

12           (1) ESTABLISHMENT.—If the Secretary deter-  
13          mines in the report described in subsection (b) that  
14          the implementation of advanced insulation into cov-  
15          ered refrigeration units would generate an economi-  
16          cally justifiable amount of cost savings, the Sec-  
17          retary, in cooperation with manufacturers of covered  
18          refrigeration units, shall establish a demonstration  
19          program under which the Secretary shall dem-  
20          onstrate the cost-effectiveness of advanced insula-  
21          tion.

22           (2) DISCLOSURE.—Section 623 of the Energy  
23          Policy Act of 1992 (42 U.S.C. 13293) may apply to  
24          any project carried out under this subsection.

1 (3) COST-SHARING.—Section 988 of the Energy  
2 Policy Act of 2005 (42 U.S.C. 16352) shall apply to  
3 any project carried out under this subsection.

4 (d) AUTHORIZATION OF APPROPRIATIONS.—Of the  
5 funds authorized under section 911(b) of Public Law 109–  
6 58, the Energy Policy Act of 2005, such sums shall be  
7 allocated to carry out this program.

8 **Subtitle D—Setting Energy**  
9 **Efficiency Goals**

10 **SEC. 251. OIL SAVINGS PLAN AND REQUIREMENTS.**

11 (a) OIL SAVINGS TARGET AND ACTION PLAN.—Not  
12 later than 270 days after the date of enactment of this  
13 Act, the Director of the Office of Management and Budget  
14 (referred to in this section as the “Director”) shall publish  
15 in the Federal Register an action plan consisting of—

16 (1) a list of requirements proposed or to be pro-  
17 posed pursuant to subsection (b) that are authorized  
18 to be issued under law in effect on the date of enact-  
19 ment of this Act, and this Act, that will be suffi-  
20 cient, when taken together, to save from the baseline  
21 determined under subsection (e)—

22 (A) 2,500,000 barrels of oil per day on av-  
23 erage during calendar year 2016;

24 (B) 7,000,000 barrels of oil per day on av-  
25 erage during calendar year 2026; and

1 (C) 10,000,000 barrels per day on average  
2 during calendar year 2031; and

3 (2) a Federal Government-wide analysis  
4 demonstrating—

5 (A) the expected oil savings from the base-  
6 line to be accomplished by each requirement;  
7 and

8 (B) that all such requirements, taken to-  
9 gether, will achieve the oil savings specified in  
10 this subsection.

11 (b) STANDARDS AND REQUIREMENTS.—

12 (1) IN GENERAL.—On or before the date of  
13 publication of the action plan under subsection (a),  
14 the Secretary of Energy, the Secretary of Transpor-  
15 tation, the Secretary of Defense, the Secretary of  
16 Agriculture, the Secretary of the Treasury, the Ad-  
17 ministrator of the Environmental Protection Agency,  
18 and the head of any other agency the President de-  
19 termines appropriate shall each propose, or issue a  
20 notice of intent to propose, regulations establishing  
21 each standard or other requirement listed in the ac-  
22 tion plan that is under the jurisdiction of the respec-  
23 tive agency using authorities described in paragraph  
24 (2).

1           (2) AUTHORITIES.—The head of each agency  
2 described in paragraph (1) shall use to carry out  
3 this subsection—

4           (A) any authority in existence on the date  
5 of enactment of this Act (including regulations);  
6 and

7           (B) any new authority provided under this  
8 Act (including an amendment made by this  
9 Act).

10          (3) FINAL REGULATIONS.—Not later than 18  
11 months after the date of enactment of this Act, the  
12 head of each agency described in paragraph (1) shall  
13 promulgate final versions of the regulations required  
14 under this subsection.

15          (4) CONTENT OF REGULATIONS.—Each pro-  
16 posed and final regulation promulgated under this  
17 subsection shall—

18           (A) be sufficient to achieve at least the oil  
19 savings resulting from the regulation under the  
20 action plan published under subsection (a); and

21           (B) be accompanied by an analysis by the  
22 applicable agency demonstrating that the regu-  
23 lation will achieve the oil savings from the base-  
24 line determined under subsection (e).

25          (c) INITIAL EVALUATION.—

1           (1) IN GENERAL.—Not later than 2 years after  
2       the date of enactment of this Act, the Director  
3       shall—

4           (A) publish in the Federal Register a Fed-  
5       eral Government-wide analysis of—

6           (i) the oil savings achieved from the  
7       baseline established under subsection (e);  
8       and

9           (ii) the expected oil savings under the  
10      standards and requirements of this Act  
11      (and amendments made by this Act); and

12          (B) determine whether oil savings will  
13      meet the targets established under subsection  
14      (a).

15          (2) INSUFFICIENT OIL SAVINGS.—If the oil sav-  
16      ings are less than the targets established under sub-  
17      section (a), simultaneously with the analysis re-  
18      quired under paragraph (1)—

19          (A) the Director shall publish a revised ac-  
20      tion plan that is sufficient to achieve the tar-  
21      gets; and

22          (B) the head of each agency referred to in  
23      subsection (b)(1) shall propose new or revised  
24      regulations that are sufficient to achieve the



1 targets under paragraphs (1), (2), and (3), re-  
2 spectively, of subsection (b).

3 (3) FINAL REGULATIONS.—Not later than 180  
4 days after the date on which regulations are pro-  
5 posed under paragraph (2)(B), the head of each  
6 agency referred to in subsection (b)(1) shall promul-  
7 gate final versions of those regulations that comply  
8 with subsection (b)(1).

9 (d) REVIEW AND UPDATE OF ACTION PLAN.—

10 (1) REVIEW.—Not later than January 1, 2011,  
11 and every 3 years thereafter, the Director shall sub-  
12 mit to Congress, and publish, a report that—

13 (A) evaluates the progress achieved in im-  
14 plementing the oil savings targets established  
15 under subsection (a);

16 (B) analyzes the expected oil savings under  
17 the standards and requirements established  
18 under this Act and the amendments made by  
19 this Act; and

20 (C)(i) analyzes the potential to achieve oil  
21 savings that are in addition to the savings re-  
22 quired by subsection (a); and

23 (ii) if the President determines that it is in  
24 the national interest, establishes a higher oil

1 savings target for calendar year 2017 or any  
2 subsequent calendar year.

3 (2) INSUFFICIENT OIL SAVINGS.—If the oil sav-  
4 ings are less than the targets established under sub-  
5 section (a), simultaneously with the report required  
6 under paragraph (1)—

7 (A) the Director shall publish a revised ac-  
8 tion plan that is sufficient to achieve the tar-  
9 gets; and

10 (B) the head of each agency referred to in  
11 subsection (b)(1) shall propose new or revised  
12 regulations that are sufficient to achieve the  
13 targets under paragraphs (1), (2), and (3), re-  
14 spectively, of subsection (b).

15 (3) FINAL REGULATIONS.—Not later than 180  
16 days after the date on which regulations are pro-  
17 posed under paragraph (2)(B), the head of each  
18 agency referred to in subsection (b)(1) shall promul-  
19 gate final versions of those regulations that comply  
20 with subsection (b)(1).

21 (e) BASELINE AND ANALYSIS REQUIREMENTS.—In  
22 performing the analyses and promulgating proposed or  
23 final regulations to establish standards and other require-  
24 ments necessary to achieve the oil savings required by this  
25 section, the Secretary of Energy, the Secretary of Trans-

1 portation, the Secretary of Defense, the Secretary of Agri-  
2 culture, the Administrator of the Environmental Protec-  
3 tion Agency, and the head of any other agency the Presi-  
4 dent determines to be appropriate shall—

5 (1) determine oil savings as the projected re-  
6 duction in oil consumption from the baseline estab-  
7 lished by the reference case contained in the report  
8 of the Energy Information Administration entitled  
9 “Annual Energy Outlook 2005”;

10 (2) determine the oil savings projections re-  
11 quired on an annual basis for each of calendar years  
12 2009 through 2026; and

13 (3) account for any overlap among the stand-  
14 ards and other requirements to ensure that the pro-  
15 jected oil savings from all the promulgated stand-  
16 ards and requirements, taken together, are as accu-  
17 rate as practicable.

18 (f) NONREGULATORY MEASURES.—The action plan  
19 required under subsection (a) and the revised action plans  
20 required under subsections (c) and (d) shall include—

21 (1) a projection of the barrels of oil displaced  
22 by efficiency and sources of energy other than oil,  
23 including biofuels, electricity, and hydrogen; and

1           (2) a projection of the barrels of oil saved  
2           through enactment of this Act and the Energy Pol-  
3           icy Act of 2005 (42 U.S.C. 15801 et seq.).

4 **SEC. 252. NATIONAL ENERGY EFFICIENCY IMPROVEMENT**  
5 **GOALS.**

6           (a) GOALS.—The goals of the United States are—

7               (1) to achieve an improvement in the overall en-  
8               ergy productivity of the United States (measured in  
9               gross domestic product per unit of energy input) of  
10              at least 2.5 percent per year by the year 2012; and

11             (2) to maintain that annual rate of improve-  
12             ment each year through 2030.

13           (b) STRATEGIC PLAN.—

14               (1) IN GENERAL.—Not later than 1 year after  
15               the date of enactment of this Act, the Secretary, in  
16               cooperation with the Administrator of the Environ-  
17               mental Protection Agency and the heads of other ap-  
18               propriate Federal agencies, shall develop a strategic  
19               plan to achieve the national goals for improvement  
20               in energy productivity established under subsection  
21               (a).

22               (2) PUBLIC INPUT AND COMMENT.—The Sec-  
23               retary shall develop the plan in a manner that pro-  
24               vides appropriate opportunities for public input and  
25               comment.

1 (c) PLAN CONTENTS.—The strategic plan shall—

2 (1) establish future regulatory, funding, and  
3 policy priorities to ensure compliance with the na-  
4 tional goals;

5 (2) include energy savings estimates for each  
6 sector; and

7 (3) include data collection methodologies and  
8 compilations used to establish baseline and energy  
9 savings data.

10 (d) PLAN UPDATES.—

11 (1) IN GENERAL.—The Secretary shall—

12 (A) update the strategic plan biennially;  
13 and

14 (B) include the updated strategic plan in  
15 the national energy policy plan required by sec-  
16 tion 801 of the Department of Energy Organi-  
17 zation Act (42 U.S.C. 7321).

18 (2) CONTENTS.—In updating the plan, the Sec-  
19 retary shall—

20 (A) report on progress made toward imple-  
21 menting efficiency policies to achieve the na-  
22 tional goals established under subsection (a);  
23 and

1 (B) verify, to the maximum extent prac-  
2 ticable, energy savings resulting from the poli-  
3 cies.

4 (e) REPORT TO CONGRESS AND PUBLIC.—The Sec-  
5 retary shall submit to Congress, and make available to the  
6 public, the initial strategic plan developed under sub-  
7 section (b) and each updated plan.

8 **SEC. 253. NATIONAL MEDIA CAMPAIGN.**

9 (a) IN GENERAL.—The Secretary, acting through the  
10 Assistant Secretary for Energy Efficiency and Renewable  
11 Energy (referred to in this section as the “Secretary”),  
12 shall develop and conduct a national media campaign—

13 (1) to increase energy efficiency throughout the  
14 economy of the United States over the next decade;

15 (2) to promote the national security benefits as-  
16 sociated with increased energy efficiency; and

17 (3) to decrease oil consumption in the United  
18 States over the next decade.

19 (b) CONTRACT WITH ENTITY.—The Secretary shall  
20 carry out subsection (a) directly or through—

21 (1) competitively bid contracts with 1 or more  
22 nationally recognized media firms for the develop-  
23 ment and distribution of monthly television, radio,  
24 and newspaper public service announcements; or

1           (2) collective agreements with 1 or more nation-  
2           ally recognized institutes, businesses, or nonprofit  
3           organizations for the funding, development, and dis-  
4           tribution of monthly television, radio, and newspaper  
5           public service announcements.

6           (c) USE OF FUNDS.—

7           (1) IN GENERAL.—Amounts made available to  
8           carry out this section shall be used for the following:

9           (A) ADVERTISING COSTS.—

10           (i) The purchase of media time and  
11           space.

12           (ii) Creative and talent costs.

13           (iii) Testing and evaluation of adver-  
14           tising.

15           (iv) Evaluation of the effectiveness of  
16           the media campaign.

17           (B) ADMINISTRATIVE COSTS.—Operational  
18           and management expenses.

19           (2) LIMITATIONS.—In carrying out this section,  
20           the Secretary shall allocate not less than 85 percent  
21           of funds made available under subsection (e) for  
22           each fiscal year for the advertising functions speci-  
23           fied under paragraph (1)(A).

24           (d) REPORTS.—The Secretary shall annually submit  
25           to Congress a report that describes—

1           (1) the strategy of the national media campaign  
2           and whether specific objectives of the campaign were  
3           accomplished, including—

4                 (A) determinations concerning the rate of  
5                 change of energy consumption, in both absolute  
6                 and per capita terms; and

7                 (B) an evaluation that enables consider-  
8                 ation whether the media campaign contributed  
9                 to reduction of energy consumption;

10           (2) steps taken to ensure that the national  
11           media campaign operates in an effective and effi-  
12           cient manner consistent with the overall strategy  
13           and focus of the campaign;

14           (3) plans to purchase advertising time and  
15           space;

16           (4) policies and practices implemented to ensure  
17           that Federal funds are used responsibly to purchase  
18           advertising time and space and eliminate the poten-  
19           tial for waste, fraud, and abuse; and

20           (5) all contracts or cooperative agreements en-  
21           tered into with a corporation, partnership, or indi-  
22           vidual working on behalf of the national media cam-  
23           paign.

24           (e) AUTHORIZATION OF APPROPRIATIONS.—



1           (1) IN GENERAL.—There is authorized to be  
2           appropriated to carry out this section \$5,000,000 for  
3           each of fiscal years 2008 through 2012.

4           (2) DECREASED OIL CONSUMPTION.—The Sec-  
5           retary shall use not less than 50 percent of the  
6           amount that is made available under this section for  
7           each fiscal year to develop and conduct a national  
8           media campaign to decrease oil consumption in the  
9           United States over the next decade.

10 **SEC. 254. MODERNIZATION OF ELECTRICITY GRID SYSTEM.**

11          (a) STATEMENT OF POLICY.—It is the policy of the  
12          United States that developing and deploying advanced  
13          technology to modernize and increase the efficiency of the  
14          electricity grid system of the United States is essential to  
15          maintain a reliable and secure electricity transmission and  
16          distribution infrastructure that can meet future demand  
17          growth.

18          (b) PROGRAMS.—The Secretary, the Federal Energy  
19          Regulatory Commission, and other Federal agencies, as  
20          appropriate, shall carry out programs to support the use,  
21          development, and demonstration of advanced transmission  
22          and distribution technologies, including real-time moni-  
23          toring and analytical software—

24                 (1) to maximize the capacity and efficiency of  
25                 electricity networks;

- 1 (2) to enhance grid reliability;
- 2 (3) to reduce line losses;
- 3 (4) to facilitate the transition to real-time elec-
- 4 tricity pricing;
- 5 (5) to allow grid incorporation of more onsite
- 6 renewable energy generators;
- 7 (6) to enable electricity to displace a portion of
- 8 the petroleum used to power the national transpor-
- 9 tation system of the United States; and
- 10 (7) to enable broad deployment of distributed
- 11 generation and demand side management tech-
- 12 nology.

13 **SEC. 255. SMART GRID SYSTEM REPORT.**

14 (a) IN GENERAL.—The Secretary, acting through the  
15 Director of the Office of Electricity Delivery and Energy  
16 Reliability (referred to in this section as the “Secretary”),  
17 shall, after consulting with any interested individual or en-  
18 tity as appropriate, no later than one year after enact-  
19 ment, report to Congress concerning the status of smart  
20 grid deployments nationwide and any regulatory or gov-  
21 ernment barriers to continued deployment.

22 **SEC. 256. SMART GRID TECHNOLOGY RESEARCH, DEVELOP-**  
23 **MENT, AND DEMONSTRATION.**

24 (a) POWER GRID DIGITAL INFORMATION TECH-  
25 NOLOGY.—The Secretary, in consultation with the Federal

1 Energy Regulatory Commission and other appropriate  
2 agencies, electric utilities, the States, and other stake-  
3 holders, shall carry out a program—

4 (1) to develop advanced techniques for meas-  
5 uring peak load reductions and energy-efficiency sav-  
6 ings from smart metering, demand response, distrib-  
7 uted generation, and electricity storage systems;

8 (2) to investigate means for demand response,  
9 distributed generation, and storage to provide ancil-  
10 lary services;

11 (3) to conduct research to advance the use of  
12 wide-area measurement and control networks, in-  
13 cluding data mining, visualization, advanced com-  
14 puting, and secure and dependable communications  
15 in a highly-distributed environment;

16 (4) to test new reliability technologies in a grid  
17 control room environment against a representative  
18 set of local outage and wide area blackout scenarios;

19 (5) to investigate the feasibility of a transition  
20 to time-of-use and real-time electricity pricing;

21 (6) to develop algorithms for use in electric  
22 transmission system software applications;

23 (7) to promote the use of underutilized elec-  
24 tricity generation capacity in any substitution of

1 electricity for liquid fuels in the transportation sys-  
2 tem of the United States; and

3 (8) in consultation with the Federal Energy  
4 Regulatory Commission, to propose interconnection  
5 protocols to enable electric utilities to access elec-  
6 tricity stored in vehicles to help meet peak demand  
7 loads.

8 (b) SMART GRID REGIONAL DEMONSTRATION INI-  
9 TIATIVE.—

10 (1) IN GENERAL.—The Secretary shall establish  
11 a smart grid regional demonstration initiative (re-  
12 ferred to in this subsection as the “Initiative”) com-  
13 posed of demonstration projects specifically focused  
14 on advanced technologies for use in power grid sens-  
15 ing, communications, analysis, and power flow con-  
16 trol. The Secretary shall seek to leverage existing  
17 smart grid deployments.

18 (2) GOALS.—The goals of the Initiative shall  
19 be—

20 (A) to demonstrate the potential benefits  
21 of concentrated investments in advanced grid  
22 technologies on a regional grid;

23 (B) to facilitate the commercial transition  
24 from the current power transmission and dis-

1           tribution system technologies to advanced tech-  
2           nologies;

3           (C) to facilitate the integration of ad-  
4           vanced technologies in existing electric networks  
5           to improve system performance, power flow con-  
6           trol, and reliability;

7           (D) to demonstrate protocols and stand-  
8           ards that allow for the measurement and valida-  
9           tion of the energy savings and fossil fuel emis-  
10          sion reductions associated with the installation  
11          and use of energy efficiency and demand re-  
12          sponse technologies and practices; and

13          (E) to investigate differences in each re-  
14          gion and regulatory environment regarding best  
15          practices in implementing smart grid tech-  
16          nologies.

17       (3) DEMONSTRATION PROJECTS.—

18           (A) IN GENERAL.—In carrying out the ini-  
19           tiative, the Secretary shall carry out smart grid  
20           demonstration projects in up to 5 electricity  
21           control areas, including rural areas and at least  
22           1 area in which the majority of generation and  
23           transmission assets are controlled by a tax-ex-  
24           empt entity.

1 (B) COOPERATION.—A demonstration  
2 project under subparagraph (A) shall be carried  
3 out in cooperation with the electric utility that  
4 owns the grid facilities in the electricity control  
5 area in which the demonstration project is car-  
6 ried out.

7 (C) FEDERAL SHARE OF COST OF TECH-  
8 NOLOGY INVESTMENTS.—The Secretary shall  
9 provide to an electric utility described in sub-  
10 paragraph (B) financial assistance for use in  
11 paying an amount equal to not more than 50  
12 percent of the cost of qualifying advanced grid  
13 technology investments made by the electric  
14 utility to carry out a demonstration project.

15 (4) AUTHORIZATION OF APPROPRIATIONS.—  
16 There are authorized to be appropriated—

17 (A) to carry out subsection (a), such sums  
18 as are necessary for each of fiscal years 2008  
19 through 2012; and

20 (B) to carry out subsection (b),  
21 \$100,000,000 for each of fiscal years 2008  
22 through 2012.

23 **SEC. 257. SMART GRID INTEROPERABILITY FRAMEWORK.**

24 (a) INTEROPERABILITY FRAMEWORK.—The Federal  
25 Energy Regulatory Commission (referred to in this section

1 as the “Commission”), in cooperation with other relevant  
2 federal agencies, shall coordinate with smart grid stake-  
3 holders to develop protocols for the establishment of a  
4 flexible framework for the connection of smart grid devices  
5 and systems that would align policy, business, and tech-  
6 nology approaches in a manner that would enable all elec-  
7 tric resources, including demand-side resources, to con-  
8 tribute to an efficient, reliable electricity network.

9 (c) SCOPE OF FRAMEWORK.—The framework devel-  
10 oped under subsection (b) shall be designed—

11 (1) to accommodate traditional, centralized gen-  
12 eration and transmission resources and consumer  
13 distributed resources, including distributed genera-  
14 tion, renewable generation, energy storage, energy  
15 efficiency, and demand response and enabling de-  
16 vices and systems;

17 (2) to be flexible to incorporate—

18 (A) regional and organizational differences;

19 and

20 (B) technological innovations; and

21 (3) to consider include voluntary uniform stand-  
22 ards for certain classes of mass-produced electric ap-  
23 pliances and equipment for homes and businesses  
24 that enable customers, at their election and con-  
25 sistent with applicable State and federal laws, and

1 are manufactured with the ability to respond to elec-  
2 tric grid emergencies and demand response signals  
3 by curtailing all, or a portion of, the electrical power  
4 consumed by the appliances or equipment in re-  
5 sponse to an emergency or demand response signal,  
6 including through—

7 (A) load reduction to reduce total electrical  
8 demand;

9 (B) adjustment of load to provide grid an-  
10 cillary services; and

11 (C) in the event of a reliability crisis that  
12 threatens an outage, short-term load shedding  
13 to help preserve the stability of the grid.

14 (4) Such voluntary standards should incor-  
15 porate appropriate manufacturer lead time.

16 **SEC. 258. STATE CONSIDERATION OF SMART GRID.**

17 Section 111(d) of the Public Utility Regulatory Poli-  
18 cies Act of 1978 (16 U.S.C. 2621(d)) is amended by add-  
19 ing at the end the following:

20 “(16) CONSIDERATION OF SMART GRID IN-  
21 VESTMENTS.—Each State shall consider requir-  
22 ing that, prior to undertaking investments in  
23 nonadvanced grid technologies, an electric util-  
24 ity of the State demonstrate to the State that  
25 the electric utility considered an investment in



1 a qualified smart grid system based on appro-  
2 priate factors, including—

3 “(i) total costs;

4 “(ii) cost-effectiveness;

5 “(iii) improved reliability;

6 “(iv) security;

7 “(v) system performance; and

8 “(vi) societal benefit.

9 “(B) RATE RECOVERY.—Each State shall  
10 consider authorizing each electric utility of the  
11 State to recover from ratepayers any capital,  
12 operating expenditure, or other costs of the  
13 electric utility relating to the deployment of a  
14 qualified smart grid system, including a reason-  
15 able rate of return on the capital expenditures  
16 of the electric utility for the deployment of the  
17 qualified smart grid system.

18 “(C) OBSOLETE EQUIPMENT.—Each State  
19 shall consider authorizing any electric utility or  
20 other party of the State to deploy a qualified  
21 smart grid system to recover in a timely man-  
22 ner the remaining book-value costs of any  
23 equipment rendered obsolete by the deployment  
24 of the qualified smart grid system, based on the

1 remaining depreciable life of the obsolete equip-  
2 ment.”.

3 **SEC. 259. SUPPORT FOR ENERGY INDEPENDENCE OF THE**  
4 **UNITED STATES.**

5 It is the policy of the United States to provide sup-  
6 port for projects and activities to facilitate the energy  
7 independence of the United States so as to ensure that  
8 all but 10 percent of the energy needs of the United States  
9 are supplied by domestic energy sources.

10 **SEC. 260. ENERGY POLICY COMMISSION.**

11 (a) ESTABLISHMENT.—

12 (1) IN GENERAL.—There is established a com-  
13 mission, to be known as the “National Commission  
14 on Energy Independence” (referred to in this section  
15 as the “Commission”).

16 (2) MEMBERSHIP.—The Commission shall be  
17 composed of 15 members, of whom—

18 (A) 3 shall be appointed by the President;

19 (B) 3 shall be appointed by the majority  
20 leader of the Senate;

21 (C) 3 shall be appointed by the minority  
22 leader of the Senate;

23 (D) 3 shall be appointed by the Speaker of  
24 the House of Representatives; and

1 (E) 3 shall be appointed by the minority  
2 leader of the House of Representatives.

3 (3) CO-CHAIRPERSONS.—

4 (A) IN GENERAL.—The President shall  
5 designate 2 co-chairpersons from among the  
6 members of the Commission appointed.

7 (B) POLITICAL AFFILIATION.—The co-  
8 chairpersons designated under subparagraph  
9 (A) shall not both be affiliated with the same  
10 political party.

11 (4) DEADLINE FOR APPOINTMENT.—Members  
12 of the Commission shall be appointed not later than  
13 90 days after the date of enactment of this Act.

14 (5) TERM; VACANCIES.—

15 (A) TERM.—A member of the Commission  
16 shall be appointed for the life of the Commis-  
17 sion.

18 (B) VACANCIES.—Any vacancy in the  
19 Commission—

20 (i) shall not affect the powers of the  
21 Commission; and

22 (ii) shall be filled in the same manner  
23 as the original appointment.

1 (b) PURPOSE.—The Commission shall conduct a  
2 comprehensive review of the energy policy of the United  
3 States by—

4 (1) reviewing relevant analyses of the current  
5 and long-term energy policy of, and conditions in,  
6 the United States;

7 (2) identifying problems that may threaten the  
8 achievement by the United States of long-term en-  
9 ergy policy goals, including energy independence;

10 (3) analyzing potential solutions to problems  
11 that threaten the long-term ability of the United  
12 States to achieve those energy policy goals; and

13 (4) providing recommendations that will ensure,  
14 to the maximum extent practicable, that the energy  
15 policy goals of the United States are achieved.

16 (c) REPORT AND RECOMMENDATIONS.—

17 (1) IN GENERAL.—Not later than December 31  
18 of each of calendar years 2009, 2011, 2013, and  
19 2015, the Commission shall submit to Congress and  
20 the President a report on the progress of United  
21 States in meeting the long-term energy policy goal  
22 of energy independence, including a detailed state-  
23 ment of the consensus findings, conclusions, and rec-  
24 ommendations of the Commission.

1           (2) LEGISLATIVE LANGUAGE.—If a rec-  
2       ommendation submitted under paragraph (1) in-  
3       volves legislative action, the report shall include pro-  
4       posed legislative language to carry out the action.

5       (d) COMMISSION PERSONNEL MATTERS.—

6           (1) STAFF AND DIRECTOR.—The Commission  
7       shall have a staff headed by an Executive Director.

8           (2) STAFF APPOINTMENT.—The Executive Di-  
9       rector may appoint such personnel as the Executive  
10      Director and the Commission determine to be appro-  
11      priate.

12          (3) EXPERTS AND CONSULTANTS.—With the  
13      approval of the Commission, the Executive Director  
14      may procure temporary and intermittent services  
15      under section 3109(b) of title 5, United States Code.

16          (4) FEDERAL AGENCIES.—

17               (A) DETAIL OF GOVERNMENT EMPLOY-  
18      EES.—

19                   (i) IN GENERAL.—Upon the request  
20                   of the Commission, the head of any Fed-  
21                   eral agency may detail, without reimburse-  
22                   ment, any of the personnel of the Federal  
23                   agency to the Commission to assist in car-  
24                   rying out the duties of the Commission.

1 (ii) NATURE OF DETAIL.—Any detail  
2 of a Federal employee under clause (i)  
3 shall not interrupt or otherwise affect the  
4 civil service status or privileges of the Fed-  
5 eral employee.

6 (B) TECHNICAL ASSISTANCE.—Upon the  
7 request of the Commission, the head of a Fed-  
8 eral agency shall provide such technical assist-  
9 ance to the Commission as the Commission de-  
10 termines to be necessary to carry out the duties  
11 of the Commission.

12 (e) RESOURCES.—

13 (1) IN GENERAL.—The Commission shall have  
14 reasonable access to materials, resources, statistical  
15 data, and such other information from Executive  
16 agencies as the Commission determines to be nec-  
17 essary to carry out the duties of the Commission.

18 (2) FORM OF REQUESTS.—The co-chairpersons  
19 of the Commission shall make requests for access  
20 described in paragraph (1) in writing, as necessary.

1 **Subtitle E—Promoting Federal**  
2 **Leadership in Energy Efficiency**  
3 **and Renewable Energy**

4 **SEC. 261. FEDERAL FLEET CONSERVATION REQUIRE-**  
5 **MENTS.**

6 (a) FEDERAL FLEET CONSERVATION REQUIRE-  
7 MENTS.—

8 (1) IN GENERAL.—Part J of title III of the En-  
9 ergy Policy and Conservation Act (42 U.S.C. 6374  
10 et seq.) is amended by adding at the end the fol-  
11 lowing:

12 **“SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIRE-**  
13 **MENTS.**

14 “(a) MANDATORY REDUCTION IN PETROLEUM CON-  
15 SUMPTION.—

16 “(1) IN GENERAL.—The Secretary shall issue  
17 regulations (including provisions for waivers from  
18 the requirements of this section) for Federal fleets  
19 subject to section 400AA requiring that not later  
20 than October 1, 2015, each Federal agency achieve  
21 at least a 20 percent reduction in petroleum con-  
22 sumption, and that each Federal agency increase al-  
23 ternative fuel consumption by 10 percent annually,  
24 as calculated from the baseline established by the  
25 Secretary for fiscal year 2005.

1 “(2) PLAN.—

2 “(A) REQUIREMENT.—The regulations  
3 shall require each Federal agency to develop a  
4 plan to meet the required petroleum reduction  
5 levels and the alternative fuel consumption in-  
6 creases.

7 “(B) MEASURES.—The plan may allow an  
8 agency to meet the required petroleum reduc-  
9 tion level through—

10 “(i) the use of alternative fuels;

11 “(ii) the acquisition of vehicles with  
12 higher fuel economy, including hybrid vehi-  
13 cles, neighborhood electric vehicles, electric  
14 vehicles, and plug-in hybrid vehicles if the  
15 vehicles are commercially available;

16 “(iii) the substitution of cars for light  
17 trucks;

18 “(iv) an increase in vehicle load fac-  
19 tors;

20 “(v) a decrease in vehicle miles trav-  
21 eled;

22 “(vi) a decrease in fleet size; and

23 “(vii) other measures.

24 “(b) FEDERAL EMPLOYEE INCENTIVE PROGRAMS  
25 FOR REDUCING PETROLEUM CONSUMPTION.—



1           “(1) IN GENERAL.—Each Federal agency shall  
2           actively promote incentive programs that encourage  
3           Federal employees and contractors to reduce petro-  
4           leum usage through the use of practices such as—

5                   “(A) telecommuting;

6                   “(B) public transit;

7                   “(C) carpooling; and

8                   “(D) bicycling and the use of 2-wheeled  
9           electric drive devices.

10           “(2) MONITORING AND SUPPORT FOR INCEN-  
11           TIVE PROGRAMS.—The Administrator of General  
12           Services, the Director of the Office of Personnel  
13           Management, and the Secretary of Energy shall  
14           monitor and provide appropriate support to agency  
15           programs described in paragraph (1).

16           “(3) RECOGNITION.—The Secretary may estab-  
17           lish a program under which the Secretary recognizes  
18           private sector employers and State and local govern-  
19           ments for outstanding programs to reduce petroleum  
20           usage through practices described in paragraph (1).

21           “(c) REPLACEMENT TIRES.—

22           “(1) IN GENERAL.—Except as provided in para-  
23           graph (2), the regulations issued under subsection  
24           (a)(1) shall include a requirement that, to the max-  
25           imum extent practicable, each Federal agency pur-

1 chase energy-efficient replacement tires for the re-  
2 spective fleet vehicles of the agency.

3 “(2) EXCEPTIONS.—This section does not apply  
4 to—

5 “(A) law enforcement motor vehicles;

6 “(B) emergency motor vehicles; or

7 “(C) motor vehicles acquired and used for  
8 military purposes that the Secretary of Defense  
9 has certified to the Secretary must be exempt  
10 for national security reasons.

11 “(d) ANNUAL REPORTS ON COMPLIANCE.—The Sec-  
12 retary shall submit to Congress an annual report that  
13 summarizes actions taken by Federal agencies to comply  
14 with this section.”.

15 (2) TABLE OF CONTENTS AMENDMENT.—The  
16 table of contents of the Energy Policy and Conserva-  
17 tion Act (42 U.S.C. prec. 6201) is amended by add-  
18 ing at the end of the items relating to part J of title  
19 III the following:

*“Sec. 400FF. Federal fleet conservation requirements.”.*

20 (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
21 authorized to be appropriated to carry out the amendment  
22 made by this section \$10,000,000 for the period of fiscal  
23 years 2008 through 2013.

1 **SEC. 262. FEDERAL REQUIREMENT TO PURCHASE ELEC-**  
2 **TRICITY GENERATED BY RENEWABLE EN-**  
3 **ERGY.**

4 Section 203 of the Energy Policy Act of 2005 (42  
5 U.S.C. 15852) is amended—

6 (1) by striking subsection (a) and inserting the  
7 following:

8 “(a) REQUIREMENT.—

9 “(1) IN GENERAL.—The President, acting  
10 through the Secretary, shall require that, to the ex-  
11 tent economically feasible and technically prac-  
12 ticable, of the total quantity of domestic electric en-  
13 ergy the Federal Government consumes during any  
14 fiscal year, the following percentages shall be renew-  
15 able energy from facilities placed in service after  
16 January 1, 1999:

17 “(A) Not less than 10 percent in fiscal  
18 year 2010.

19 “(B) Not less than 15 percent in fiscal  
20 year 2015.

21 “(2) CAPITOL COMPLEX.—The Architect of the  
22 Capitol, in consultation with the Secretary, shall en-  
23 sure that, of the total quantity of electric energy the  
24 Capitol complex consumes during any fiscal year, the  
25 percentages prescribed in paragraph (1) shall be re-  
26 newable energy.

1           “(3) WAIVER AUTHORITY.—The President may  
2       reduce or waive the requirement under paragraph  
3       (1) on a fiscal-year basis if the President determines  
4       that complying with paragraph (1) for a fiscal year  
5       would result in—

6           “(A) a negative impact on military training  
7       or readiness activities conducted by the Depart-  
8       ment of Defense;

9           “(B) a negative impact on domestic pre-  
10      paredness activities conducted by the Depart-  
11      ment of Homeland Security; or

12          “(C) a requirement that a Federal agency  
13      provide emergency response services in the  
14      event of a natural disaster or terrorist attack.”;  
15      and

16          (2) by adding at the end the following:

17      “(e) CONTRACTS FOR RENEWABLE ENERGY FROM  
18      PUBLIC UTILITY SERVICES.—Notwithstanding section  
19      501(b)(1)(B) of title 40, United States Code, a contract  
20      for renewable energy may be made for a period of not  
21      more than 50 years.”.

22      **SEC. 263. ENERGY SAVINGS PERFORMANCE CONTRACTS.**

23          (a) RETENTION OF SAVINGS.—Section 546(c) of the  
24      National Energy Conservation Policy Act (42 U.S.C.  
25      8256(c)) is amended by striking paragraph (5).

1 (b) SUNSET AND REPORTING REQUIREMENTS.—Sec-  
2 tion 801 of the National Energy Conservation Policy Act  
3 (42 U.S.C. 8287) is amended by striking subsection (c).

4 (c) DEFINITION OF ENERGY SAVINGS.—Section  
5 804(2) of the National Energy Conservation Policy Act  
6 (42 U.S.C. 8287c(2)) is amended—

7 (1) by redesignating subparagraphs (A), (B),  
8 and (C) as clauses (i), (ii), and (iii), respectively,  
9 and indenting appropriately;

10 (2) by striking “means a reduction” and insert-  
11 ing “means—

12 “(A) a reduction”;

13 (3) by striking the period at the end and insert-  
14 ing a semicolon; and

15 (4) by adding at the end the following:

16 “(B) the increased efficient use of an exist-  
17 ing energy source by cogeneration or heat re-  
18 covery, and installation of renewable energy sys-  
19 tems;

20 “(C) if otherwise authorized by Federal or  
21 State law (including regulations), the sale or  
22 transfer of electrical or thermal energy gen-  
23 erated on-site from renewable energy sources or  
24 cogeneration, but in excess of Federal needs, to  
25 utilities or non-Federal energy users; and

1 “(D) the increased efficient use of existing  
2 water sources in interior or exterior applica-  
3 tions.”.

4 (d) NOTIFICATION.—

5 (1) AUTHORITY TO ENTER INTO CONTRACTS.—

6 Section 801(a)(2)(D) of the National Energy Con-  
7 servation Policy Act (42 U.S.C. 8287(a)(2)(D)) is  
8 amended—

9 (A) in clause (ii), by inserting “and” after  
10 the semicolon at the end;

11 (B) by striking clause (iii); and

12 (C) by redesignating clause (iv) as clause  
13 (iii).

14 (2) REPORTS.—Section 548(a)(2) of the Na-  
15 tional Energy Conservation Policy Act (42 U.S.C.  
16 8258(a)(2)) is amended by inserting “and any ter-  
17 mination penalty exposure” after “the energy and  
18 cost savings that have resulted from such con-  
19 tracts”.

20 (3) CONFORMING AMENDMENT.—Section 2913  
21 of title 10, United States Code, is amended by strik-  
22 ing subsection (e).

23 (e) ENERGY AND COST SAVINGS IN NONBUILDING  
24 APPLICATIONS.—

25 (1) DEFINITIONS.—In this subsection:

1 (A) NONBUILDING APPLICATION.—The  
2 term “nonbuilding application” means—

3 (i) any class of vehicles, devices, or  
4 equipment that is transportable under the  
5 power of the applicable vehicle, device, or  
6 equipment by land, sea, or air and that  
7 consumes energy from any fuel source for  
8 the purpose of—

9 (I) that transportation; or

10 (II) maintaining a controlled en-  
11 vironment within the vehicle, device,  
12 or equipment; and

13 (ii) any federally-owned equipment  
14 used to generate electricity or transport  
15 water.

16 (B) SECONDARY SAVINGS.—

17 (i) IN GENERAL.—The term “sec-  
18 ondary savings” means additional energy  
19 or cost savings that are a direct con-  
20 sequence of the energy savings that result  
21 from the energy efficiency improvements  
22 that were financed and implemented pur-  
23 suant to an energy savings performance  
24 contract.

1 (ii) INCLUSIONS.—The term “sec-  
2 ondary savings” includes—

3 (I) energy and cost savings that  
4 result from a reduction in the need  
5 for fuel delivery and logistical support;

6 (II) personnel cost savings and  
7 environmental benefits; and

8 (III) in the case of electric gen-  
9 eration equipment, the benefits of in-  
10 creased efficiency in the production of  
11 electricity, including revenues received  
12 by the Federal Government from the  
13 sale of electricity so produced.

14 (2) STUDY.—

15 (A) IN GENERAL.—As soon as practicable  
16 after the date of enactment of this Act, the Sec-  
17 retary and the Secretary of Defense shall joint-  
18 ly conduct, and submit to Congress and the  
19 President a report of, a study of the potential  
20 for the use of energy savings performance con-  
21 tracts to reduce energy consumption and pro-  
22 vide energy and cost savings in nonbuilding ap-  
23 plications.

24 (B) REQUIREMENTS.—The study under  
25 this subsection shall include—



- 1
- (i) an estimate of the potential energy
- 2
- and cost savings to the Federal Govern-
- 3
- ment, including secondary savings and
- 4
- benefits, from increased efficiency in non-
- 5
- building applications;
- 6
- (ii) an assessment of the feasibility of
- 7
- extending the use of energy savings per-
- 8
- formance contracts to nonbuilding applica-
- 9
- tions, including an identification of any
- 10
- regulatory or statutory barriers to such
- 11
- use; and
- 12
- (iii) such recommendations as the
- 13
- Secretary and Secretary of Defense deter-
- 14
- mine to be appropriate.

15

**SEC. 264. ENERGY MANAGEMENT REQUIREMENTS FOR**

16

**FEDERAL BUILDINGS.**

17

Section 543(a)(1) of the National Energy Conserva-

18

tion Policy Act (42 U.S.C. 8253(a)(1)) is amended by

19

striking the table and inserting the following:

<i><b>“Fiscal Year</b></i>	<i><b>Percentage reduction</b></i>
<i>2006</i> .....	<i>2</i>
<i>2007</i> .....	<i>4</i>
<i>2008</i> .....	<i>9</i>
<i>2009</i> .....	<i>12</i>
<i>2010</i> .....	<i>15</i>
<i>2011</i> .....	<i>18</i>
<i>2012</i> .....	<i>21</i>
<i>2013</i> .....	<i>24</i>
<i>2014</i> .....	<i>27</i>
<i>2015</i> .....	<i>30.”</i>

1 **SEC. 265. COMBINED HEAT AND POWER AND DISTRICT EN-**  
2 **ERGY INSTALLATIONS AT FEDERAL SITES.**

3 Section 543 of the National Energy Conservation  
4 Policy Act (42 U.S.C. 8253) is amended by adding at the  
5 end the following:

6 “(f) COMBINED HEAT AND POWER AND DISTRICT  
7 ENERGY INSTALLATIONS AT FEDERAL SITES.—

8 “(1) IN GENERAL.—Not later than 18 months  
9 after the date of enactment of this subsection, the  
10 Secretary, in consultation with the Administrator of  
11 General Services and the Secretary of Defense, shall  
12 identify Federal sites that could achieve significant  
13 cost-effective energy savings through the use of com-  
14 bined heat and power or district energy installations.

15 “(2) INFORMATION AND TECHNICAL ASSIST-  
16 ANCE.—The Secretary shall provide agencies with  
17 information and technical assistance that will enable  
18 the agencies to take advantage of the energy savings  
19 described in paragraph (1).

20 “(3) ENERGY PERFORMANCE REQUIRE-  
21 MENTS.—Any energy savings from the installations  
22 described in paragraph (1) may be applied to meet  
23 the energy performance requirements for an agency  
24 under subsection (a)(1).”.

1 **SEC. 266. FEDERAL BUILDING ENERGY EFFICIENCY PER-**  
2 **FORMANCE STANDARDS.**

3 Section 305(a)(3)(A) of the Energy Conservation and  
4 Production Act (42 U.S.C. 6834(a)(3)(A)) is amended—

5 (1) in the matter preceding clause (i), by strik-  
6 ing “this paragraph” and by inserting “the Energy  
7 Efficiency Promotion Act of 2007”; and

8 (2) in clause (i)—

9 (A) in subclause (I), by striking “and” at  
10 the end;

11 (B) by redesignating subclause (II) as sub-  
12 clause (III); and

13 (C) by inserting after subclause (I) the fol-  
14 lowing:

15 “(II) the buildings be designed, to the ex-  
16 tent economically feasible and technically prac-  
17 ticable, so that the fossil fuel-generated energy  
18 consumption of the buildings is reduced, as  
19 compared with the fossil fuel-generated energy  
20 consumption by a similar Federal building in  
21 fiscal year 2003 (as measured by Commercial  
22 Buildings Energy Consumption Survey or Resi-  
23 dential Energy Consumption Survey data from  
24 the Energy Information Agency), by the per-  
25 centage specified in the following table:

<i><b>“Fiscal Year</b></i>	<i><b>Percentage reduction</b></i>
2007 .....	50
2010 .....	60
2015 .....	70
2020 .....	80
2025 .....	90
2030 .....	100;

1                   and”.

2   **SEC. 267. APPLICATION OF INTERNATIONAL ENERGY CON-**  
3                   **SERVATION CODE TO PUBLIC AND ASSISTED**  
4                   **HOUSING.**

5           Section 109 of the Cranston-Gonzalez National Af-  
6   fordable Housing Act (42 U.S.C. 12709) is amended—

7                   (1) in subsection (a)(1)(C), by striking, “,  
8           where such standards are determined to be cost ef-  
9           fective by the Secretary of Housing and Urban De-  
10          velopment”;

11                  (2) in subsection (a)(2)—

12                               (A) by striking “the Council of American  
13                               Building Officials Model Energy Code, 1992”  
14                               and inserting “2006 International Energy Con-  
15                               servation Code”; and

16                               (B) by striking “, and, with respect to re-  
17                               habilitation and new construction of public and  
18                               assisted housing funded by HOPE VI revital-  
19                               ization grants under section 24 of the United  
20                               States Housing Act of 1937 (42 U.S.C. 1437v),  
21                               the 2003 International Energy Conservation  
22                               Code”;

1 (3) in subsection (b)—

2 (A) in the heading, by striking “MODEL  
3 ENERGY CODE.—” and inserting “INTER-  
4 NATIONAL ENERGY CONSERVATION CODE.—”;

5 (B) after “all new construction” in the  
6 first sentence insert “and rehabilitation”; and

7 (C) by striking “, and, with respect to re-  
8 habilitation and new construction of public and  
9 assisted housing funded by HOPE VI revital-  
10 ization grants under section 24 of the United  
11 States Housing Act of 1937 (42 U.S.C. 1437v),  
12 the 2003 International Energy Conservation  
13 Code”;

14 (4) in subsection (c)—

15 (A) in the heading, by striking “MODEL  
16 ENERGY CODE AND”; and

17 (B) by striking “, or, with respect to reha-  
18 bilitation and new construction of public and  
19 assisted housing funded by HOPE VI revital-  
20 ization grants under section 24 of the United  
21 States Housing Act of 1937 (42 U.S.C. 1437v),  
22 the 2003 International Energy Conservation  
23 Code”;

24 (5) by adding at the end the following:

1       “(d) FAILURE TO AMEND THE STANDARDS.—If the  
2 Secretaries have not, within 1 year after the requirements  
3 of the 2006 IECC or the ASHRAE Standard 90.1–2004  
4 are revised, amended the standards or made a determina-  
5 tion under subsection (c) of this section, the Secretary of  
6 Housing and Urban Development or the Secretary of Agri-  
7 culture make a determination that the revised codes do  
8 not negatively affect the availability or affordability of new  
9 construction of assisted housing and single family and  
10 multifamily residential housing (other than manufactured  
11 homes) subject to mortgages insured under the National  
12 Housing Act (12 U.S.C. 1701 et seq.) or insured, guaran-  
13 teed, or made by the Secretary of Agriculture under title  
14 V of the Housing Act of 1949 (42 U.S.C. 1471 et seq.),  
15 respectively, and the Secretary of Energy has made a de-  
16 termination under section 304 of the Energy Conservation  
17 and Production Act (42 U.S.C. 6833) that the revised  
18 code or standard would improve energy efficiency, all new  
19 construction and rehabilitation of housing specified in sub-  
20 section (a) shall meet the requirements of the revised code  
21 or standard.”;

22           (6) by striking “CABO Model Energy Code,  
23       1992” each place it appears and inserting “the 2006  
24       IECC”; and

1 (7) by striking “1989” each place it appears  
2 and inserting “2004”.

3 **SEC. 268. ENERGY EFFICIENT COMMERCIAL BUILDINGS**  
4 **INITIATIVE.**

5 (a) DEFINITIONS.—In this section:

6 (1) CONSORTIUM.—The term “consortium”  
7 means a working group that is comprised of—

8 (A) individuals representing—

9 (i) 1 or more businesses engaged in—

10 (I) commercial building develop-  
11 ment;

12 (II) construction; or

13 (III) real estate;

14 (ii) financial institutions;

15 (iii) academic or research institutions;

16 (iv) State or utility energy efficiency  
17 programs;

18 (v) nongovernmental energy efficiency  
19 organizations; and

20 (vi) the Federal Government;

21 (B) 1 or more building designers; and

22 (C) 1 or more individuals who own or oper-  
23 ate 1 or more buildings.

24 (2) ENERGY EFFICIENT COMMERCIAL BUILD-  
25 ING.—The term “energy efficient commercial build-

1       ing’’ means a commercial building that is designed,  
2       constructed, and operated—

3               (A) to require a greatly reduced quantity  
4       of energy;

5               (B) to meet, on an annual basis, the bal-  
6       ance of energy needs of the commercial building  
7       from renewable sources of energy; and

8               (C) to be economically viable.

9       (3) INITIATIVE.—The term “initiative” means  
10      the Energy Efficient Commercial Buildings Initia-  
11      tive.

12      (b) INITIATIVE.—

13              (1) IN GENERAL.—The Secretary shall enter  
14      into an agreement with the consortium to develop  
15      and carry out the initiative—

16              (A) to reduce the quantity of energy con-  
17      sumed by commercial buildings located in the  
18      United States; and

19              (B) to achieve the development of energy  
20      efficient commercial buildings in the United  
21      States.

22              (2) GOAL OF INITIATIVE.—The goal of the ini-  
23      tiative shall be to develop technologies and practices  
24      and implement policies that lead to energy efficient  
25      commercial buildings for—



1 (A) any commercial building newly con-  
2 structed in the United States by 2030;

3 (B) 50 percent of the commercial building  
4 stock of the United States by 2040; and

5 (C) all commercial buildings in the United  
6 States by 2050.

7 (3) COMPONENTS.—In carrying out the initia-  
8 tive, the Secretary, in collaboration with the consor-  
9 tium, may—

10 (A) conduct research and development on  
11 building design, materials, equipment and con-  
12 trols, operation and other practices, integration,  
13 energy use measurement and benchmarking,  
14 and policies;

15 (B) conduct demonstration projects to  
16 evaluate replicable approaches to achieving en-  
17 ergy efficient commercial buildings for a variety  
18 of building types in a variety of climate zones;

19 (C) conduct deployment activities to dis-  
20 seminate information on, and encourage wide-  
21 spread adoption of, technologies, practices, and  
22 policies to achieve energy efficient commercial  
23 buildings; and

24 (D) conduct any other activity necessary to  
25 achieve any goal of the initiative, as determined

1 by the Secretary, in collaboration with the con-  
2 sortium.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—

4 (1) IN GENERAL.—There are authorized to be  
5 appropriated such sums as are necessary to carry  
6 out this section.

7 (2) ADDITIONAL FUNDING.—In addition to  
8 amounts authorized to be appropriated under para-  
9 graph (1), the Secretary may allocate funds from  
10 other appropriations to the initiative without chang-  
11 ing the purpose for which the funds are appro-  
12 priated.

13 **SEC. 269. CLEAN ENERGY CORRIDORS.**

14 Section 216 of the Federal Power Act (16 U.S.C.  
15 824p) is amended—

16 (1) in subsection (a)—

17 (A) by striking “(1) Not later than” and  
18 inserting the following:

19 “(1) IN GENERAL.—Not later than”;

20 (B) by striking paragraph (2) and insert-  
21 ing the following:

22 “(2) REPORT AND DESIGNATIONS.—

23 “(A) IN GENERAL.—After considering al-  
24 ternatives and recommendations from interested  
25 parties (including an opportunity for comment

1 from affected States), the Secretary shall issue  
2 a report, based on the study conducted under  
3 paragraph (1), in which the Secretary may des-  
4 ignate as a national interest electric trans-  
5 mission corridor any geographic area experi-  
6 encing electric energy transmission capacity  
7 constraints or congestion that adversely affects  
8 consumers, including constraints or congestion  
9 that—

10 “(i) increases costs to consumers;

11 “(ii) limits resource options to serve  
12 load growth; or

13 “(iii) limits access to sources of clean  
14 energy, such as wind, solar energy, geo-  
15 thermal energy, and biomass.

16 “(B) ADDITIONAL DESIGNATIONS.—In ad-  
17 dition to the corridor designations made under  
18 subparagraph (A), the Secretary may designate  
19 additional corridors in accordance with that  
20 subparagraph upon the application by an inter-  
21 ested person, on the condition that the Sec-  
22 retary provides for an opportunity for notice  
23 and comment by interested persons and af-  
24 fected States on the application.”;

1 (C) in paragraph (3), the striking “(3) The  
2 Secretary” and inserting the following:

3 “(3) CONSULTATION.—The Secretary”; and

4 (D) in paragraph (4)—

5 (i) by striking “(4) In determining”  
6 and inserting the following:

7 “(4) BASIS FOR DETERMINATION.—In deter-  
8 mining”; and

9 (ii) by striking subparagraphs (A)  
10 through (E) and inserting the following:

11 “(A) the economic vitality and development  
12 of the corridor, or the end markets served by  
13 the corridor, may be constrained by lack of ade-  
14 quate or reasonably priced electricity;

15 “(B)(i) economic growth in the corridor, or  
16 the end markets served by the corridor, may be  
17 jeopardized by reliance on limited sources of en-  
18 ergy; and

19 “(ii) a diversification of supply is war-  
20 ranted;

21 “(C) the energy independence of the  
22 United States would be served by the designa-  
23 tion;

24 “(D) the designation would be in the inter-  
25 est of national energy policy; and

1           “(E) the designation would enhance na-  
2           tional defense and homeland security.”; and

3           (2) by adding at the end the following:

4           “(1) RATES AND RECOVERY OF COSTS.—

5           “(1) IN GENERAL.—Not later than 1 year after  
6           the date of enactment of this subsection, the Com-  
7           mission shall promulgate regulations providing for  
8           the allocation and recovery of costs prudently in-  
9           curred by public utilities in building and operating  
10          facilities authorized under this section for trans-  
11          mission of electric energy generated from clean  
12          sources (such as wind, solar energy, geothermal en-  
13          ergy, and biomass).

14          “(2) APPLICABLE PROVISIONS.—All rates ap-  
15          proved under the regulations promulgated under  
16          paragraph (1), including any revisions to the regula-  
17          tions, shall be subject to the requirements under sec-  
18          tions 205 and 206 that all rates, charges, terms, and  
19          conditions be just and reasonable and not unduly  
20          discriminatory or preferential.”.

21   **SEC. 270. FEDERAL STANDBY POWER STANDARD.**

22          (a) DEFINITIONS.—In this section:

23                  (1) AGENCY.—

24                          (A) IN GENERAL.—The term “Agency”  
25                  has the meaning given the term “Executive

1           agency” in section 105 of title 5, United States  
2           Code.

3           (B) INCLUSIONS.—The term “Agency” in-  
4           cludes military departments, as the term is de-  
5           fined in section 102 of title 5, United States  
6           Code.

7           (2) ELIGIBLE PRODUCT.—The term “eligible  
8           product” means a commercially available, off-the-  
9           shelf product that—

10           (A)(i) uses external standby power devices;  
11           or

12           (ii) contains an internal standby power  
13           function; and

14           (B) is included on the list compiled under  
15           subsection (d).

16           (b) FEDERAL PURCHASING REQUIREMENT.—Subject  
17           to subsection (c), if an Agency purchases an eligible prod-  
18           uct, the Agency shall purchase—

19           (1) an eligible product that uses not more than  
20           1 watt in the standby power consuming mode of the  
21           eligible product; or

22           (2) if an eligible product described in paragraph  
23           (1) is not available, the eligible product with the low-  
24           est available standby power wattage in the standby  
25           power consuming mode of the eligible product.

1 (c) LIMITATION.—The requirements of subsection (b)  
2 shall apply to a purchase by an Agency only if—

3 (1) the lower-wattage eligible product is—

4 (A) lifecycle cost-effective; and

5 (B) practicable; and

6 (2) the utility and performance of the eligible  
7 product is not compromised by the lower wattage re-  
8 quirement.

9 (d) ELIGIBLE PRODUCTS.—The Secretary of Energy,  
10 in consultation with the Secretary of Defense, the Admin-  
11 istrator of the Environmental Protection Agency, and the  
12 Administrator of General Services, shall compile a publicly  
13 accessible list of cost-effective eligible products that shall  
14 be subject to the purchasing requirements of subsection  
15 (b).

16 **SEC. 270A. STANDARD RELATING TO SOLAR HOT WATER**  
17 **HEATERS.**

18 Section 305(a)(3)(A) of the Energy Conservation and  
19 Production Act (42 U.S.C. 6834(a)(3)(A)) (as amended  
20 by section 266) is amended—

21 (1) in clause (i)(III), by striking “and” at the  
22 end;

23 (2) in clause (ii), by striking the period at the  
24 end and inserting “; and”; and

25 (3) by adding at the end the following:

1                   “(iii) if life-cycle cost-effective, as  
2                   compared to other reasonably available  
3                   technologies, not less than 30 percent of  
4                   the hot water demand for each new or sub-  
5                   stantially modified Federal building be met  
6                   through the installation and use of solar  
7                   hot water heaters.”.

8   **SEC. 270B. RENEWABLE ENERGY INNOVATION MANUFAC-**  
9                   **TURING PARTNERSHIP.**

10       (a) ESTABLISHMENT.—The Secretary shall carry out  
11   a program, to be known as the Renewable Energy Innova-  
12   tion Manufacturing Partnership Program (referred to in  
13   this section as the “Program”), to make assistance awards  
14   to eligible entities for use in carrying out research, devel-  
15   opment, and demonstration relating to the manufacturing  
16   of renewable energy technologies.

17       (b) SOLICITATION.—To carry out the Program, the  
18   Secretary shall annually conduct a competitive solicitation  
19   for assistance awards for an eligible project described in  
20   subsection (e).

21       (c) PROGRAM PURPOSES.—The purposes of the Pro-  
22   gram are—

23           (1) to develop, or aid in the development of, ad-  
24   vanced manufacturing processes, materials, and in-  
25   frastructure;



1           (2) to increase the domestic production of re-  
2       newable energy technology and components; and

3           (3) to better coordinate Federal, State, and pri-  
4       vate resources to meet regional and national renew-  
5       able energy goals through advanced manufacturing  
6       partnerships.

7       (d) ELIGIBLE ENTITIES.—An entity shall be eligible  
8       to receive an assistance award under the Program to carry  
9       out an eligible project described in subsection (e) if the  
10      entity is composed of—

11           (1) 1 or more public or private nonprofit insti-  
12      tutions or national laboratories engaged in research,  
13      development, demonstration, or technology transfer,  
14      that would participate substantially in the project;  
15      and

16           (2) 1 or more private entities engaged in the  
17      manufacturing or development of renewable energy  
18      system components (including solar energy, wind en-  
19      ergy, biomass, geothermal energy, energy storage, or  
20      fuel cells).

21       (e) ELIGIBLE PROJECTS.—An eligible entity may use  
22      an assistance award provided under this section to carry  
23      out a project relating to—

1           (1) the conduct of studies of market opportuni-  
2           ties for component manufacturing of renewable en-  
3           ergy systems;

4           (2) the conduct of multiyear applied research,  
5           development, demonstration, and deployment  
6           projects for advanced manufacturing processes, ma-  
7           terials, and infrastructure for renewable energy sys-  
8           tems; and

9           (3) other similar ventures, as approved by the  
10          Secretary, that promote advanced manufacturing of  
11          renewable technologies.

12          (f) CRITERIA AND GUIDELINES.—The Secretary shall  
13          establish criteria and guidelines for the submission, eval-  
14          uation, and funding of proposed projects under the Pro-  
15          gram.

16          (g) COST SHARING.—Section 988 of the Energy Pol-  
17          icy Act of 2005 (42 U.S.C. 16352) shall apply to a project  
18          carried out under this section.

19          (h) DISCLOSURE.—Section 623 of the Energy Policy  
20          Act of 1992 (42 U.S.C. 13293) shall apply to a project  
21          carried out under this subsection.

22          (i) SENSE OF THE SENATE.—It is the sense of the  
23          Senate that the Secretary should ensure that small busi-  
24          nesses engaged in renewable manufacturing be considered

1 for loan guarantees authorized under title XVII of the En-  
2 ergy Policy Act of 2005 (42 U.S.C. 16511 et seq.).

3 (j) AUTHORIZATION OF APPROPRIATIONS.—There is  
4 authorized to be appropriated out of funds already author-  
5 ized to carry out this section \$25,000,000 for each of fis-  
6 cal years 2008 through 2013, to remain available until ex-  
7 pended.

8 **SEC. 270C. EXPRESS LOANS FOR RENEWABLE ENERGY AND**  
9 **ENERGY EFFICIENCY.**

10 Section 7(a)(31) of the Small Business Act (15  
11 U.S.C. 636(a)(31)) is amended by adding at the end the  
12 following:

13 “(F) EXPRESS LOANS FOR RENEWABLE  
14 ENERGY AND ENERGY EFFICIENCY.—

15 “(i) DEFINITIONS.—In this  
16 subparagraph—

17 “(I) the term ‘biomass’—

18 “(aa) means any organic  
19 material that is available on a re-  
20 newable or recurring basis,  
21 including—

22 “(AA) agricultural  
23 crops;

24 “(BB) trees grown for  
25 energy production;

1 “(CC) wood waste and  
2 wood residues;

3 “(DD) plants (includ-  
4 ing aquatic plants and  
5 grasses);

6 “(EE) residues;

7 “(FF) fibers;

8 “(GG) animal wastes  
9 and other waste materials;  
10 and

11 “(HH) fats, oils, and  
12 greases (including recycled  
13 fats, oils, and greases); and

14 “(bb) does not include—

15 “(AA) paper that is  
16 commonly recycled; or

17 “(BB) unsegregated  
18 solid waste;

19 “(II) the term ‘energy efficiency  
20 project’ means the installation or up-  
21 grading of equipment that results in a  
22 significant reduction in energy usage;  
23 and

1 “(III) the term ‘renewable energy  
2 system’ means a system of energy de-  
3 rived from—

4 “(aa) a wind, solar, biomass  
5 (including biodiesel), or geo-  
6 thermal source; or

7 “(bb) hydrogen derived from  
8 biomass or water using an energy  
9 source described in item (aa).

10 “(ii) LOANS.—Loans may be made  
11 under the ‘Express Loan Program’ for the  
12 purpose of—

13 “(I) purchasing a renewable en-  
14 ergy system; or

15 “(II) an energy efficiency project  
16 for an existing business.”.

17 **SEC. 270D. SMALL BUSINESS ENERGY EFFICIENCY.**

18 (a) DEFINITIONS.—In this section—

19 (1) the terms “Administration” and “Adminis-  
20 trator” mean the Small Business Administration  
21 and the Administrator thereof, respectively;

22 (2) the term “association” means the associa-  
23 tion of small business development centers estab-  
24 lished under section 21(a)(3)(A) of the Small Busi-  
25 ness Act (15 U.S.C. 648(a)(3)(A));

1           (3) the term “disability” has the meaning given  
2           that term in section 3 of the Americans with Dis-  
3           abilities Act of 1990 (42 U.S.C. 12102);

4           (4) the term “electric utility” has the meaning  
5           given that term in section 3 of the Public Utility  
6           Regulatory Policies Act of 1978 (16 U.S.C. 2602);

7           (5) the term “on-bill financing” means a low in-  
8           terest or no interest financing agreement between a  
9           small business concern and an electric utility for the  
10          purchase or installation of equipment, under which  
11          the regularly scheduled payment of that small busi-  
12          ness concern to that electric utility is not reduced by  
13          the amount of the reduction in cost attributable to  
14          the new equipment and that amount is credited to  
15          the electric utility, until the cost of the purchase or  
16          installation is repaid;

17          (6) the term “small business concern” has the  
18          meaning given that term in section 3 of the Small  
19          Business Act (15 U.S.C. 636);

20          (7) the term “small business development cen-  
21          ter” means a small business development center de-  
22          scribed in section 21 of the Small Business Act (15  
23          U.S.C. 648);

24          (8) the term “telecommuting” means the use of  
25          telecommunications to perform work functions under

1       circumstances which reduce or eliminate the need to  
2       commute; and

3           (9) the term “veteran” has the meaning given  
4       that term in section 101 of title 38, United States  
5       Code.

6       (b) IMPLEMENTATION OF SMALL BUSINESS ENERGY  
7       EFFICIENCY PROGRAM.—

8           (1) IN GENERAL.—Not later than 90 days after  
9       the date of enactment of this Act, the Administrator  
10      shall promulgate final rules establishing the Govern-  
11      ment-wide program authorized under subsection (d)  
12      of section 337 of the Energy Policy and Conserva-  
13      tion Act (42 U.S.C. 6307) that ensure compliance  
14      with that subsection by not later than 6 months  
15      after such date of enactment.

16          (2) PLAN.—Not later than 90 days after the  
17      date of enactment of this Act, the Administrator  
18      shall publish a detailed plan regarding how the Ad-  
19      ministrator will—

20           (A) assist small business concerns in be-  
21      coming more energy efficient; and

22           (B) build on the Energy Star for Small  
23      Business Program of the Department of En-  
24      ergy and the Environmental Protection Agency.

1           (3) ASSISTANT ADMINISTRATOR FOR SMALL  
2 BUSINESS ENERGY POLICY.—

3           (A) IN GENERAL.—There is in the Admin-  
4 istration an Assistant Administrator for Small  
5 Business Energy Policy, who shall be appointed  
6 by, and report to, the Administrator.

7           (B) DUTIES.—The Assistant Adminis-  
8 trator for Small Business Energy Policy shall—

9           (i) oversee and administer the require-  
10 ments under this subsection and section  
11 337(d) of the Energy Policy and Conserva-  
12 tion Act (42 U.S.C. 6307(d)); and

13           (ii) promote energy efficiency efforts  
14 for small business concerns and reduce en-  
15 ergy costs of small business concerns.

16           (4) REPORTS.—The Administrator shall submit  
17 to the Committee on Small Business and Entrepre-  
18 neurship of the Senate and the Committee on Small  
19 Business of the House of Representatives an annual  
20 report on the progress of the Administrator in en-  
21 couraging small business concerns to become more  
22 energy efficient, including data on the rate of use of  
23 the Small Business Energy Clearinghouse estab-  
24 lished under section 337(d)(4) of the Energy Policy  
25 and Conservation Act (42 U.S.C. 6307(d)(4)).



1 (c) SMALL BUSINESS ENERGY EFFICIENCY.—

2 (1) AUTHORITY.—The Administrator shall es-  
3 tablish a Small Business Energy Efficiency Pilot  
4 Program (in this subsection referred to as the “Effi-  
5 ciency Pilot Program”) to provide energy efficiency  
6 assistance to small business concerns through small  
7 business development centers.

8 (2) SMALL BUSINESS DEVELOPMENT CEN-  
9 TERS.—

10 (A) IN GENERAL.—In carrying out the Ef-  
11 ficiency Pilot Program, the Administrator shall  
12 enter into agreements with small business de-  
13 velopment centers under which such centers  
14 shall—

15 (i) provide access to information and  
16 resources on energy efficiency practices, in-  
17 cluding on-bill financing options;

18 (ii) conduct training and educational  
19 activities;

20 (iii) offer confidential, free, one-on-  
21 one, in-depth energy audits to the owners  
22 and operators of small business concerns  
23 regarding energy efficiency practices;

24 (iv) give referrals to certified profes-  
25 sionals and other providers of energy effi-

1           ciency assistance who meet such standards  
2           for educational, technical, and professional  
3           competency as the Administrator shall es-  
4           tablish; and

5                   (v) act as a facilitator between small  
6           business concerns, electric utilities, lenders,  
7           and the Administration to facilitate on-bill  
8           financing arrangements.

9           (B) REPORTS.—Each small business devel-  
10          opment center participating in the Efficiency  
11          Pilot Program shall submit to the Adminis-  
12          trator and the Administrator of the Environ-  
13          mental Protection Agency an annual report that  
14          includes—

15                   (i) a summary of the energy efficiency  
16          assistance provided by that center under  
17          the Efficiency Pilot Program;

18                   (ii) the number of small business con-  
19          cerns assisted by that center under the Ef-  
20          ficiency Pilot Program;

21                   (iii) statistics on the total amount of  
22          energy saved as a result of assistance pro-  
23          vided by that center under the Efficiency  
24          Pilot Program; and

1 (iv) any additional information deter-  
2 mined necessary by the Administrator, in  
3 consultation with the association.

4 (C) REPORTS TO CONGRESS.—Not later  
5 than 60 days after the date on which all reports  
6 under subparagraph (B) relating to a year are  
7 submitted, the Administrator shall submit to  
8 the Committee on Small Business and Entre-  
9 preneurship of the Senate and the Committee  
10 on Small Business of the House of Representa-  
11 tives a report summarizing the information re-  
12 garding the Efficiency Pilot Program submitted  
13 by small business development centers partici-  
14 pating in that program.

15 (3) ELIGIBILITY.—A small business develop-  
16 ment center shall be eligible to participate in the Ef-  
17 ficiency Pilot Program only if that center is certified  
18 under section 21(k)(2) of the Small Business Act  
19 (15 U.S.C. 648(k)(2)).

20 (4) SELECTION OF PARTICIPATING STATE PRO-  
21 GRAMS.—

22 (A) GROUPINGS.—

23 (i) SELECTION OF PROGRAMS.—The  
24 Administrator shall select the small busi-  
25 ness development center programs of 2

1 States from each of the groupings of  
2 States described in clauses (ii) through (xi)  
3 to participate in the pilot program estab-  
4 lished under this subsection.

5 (ii) GROUP 1.—Group 1 shall consist  
6 of Maine, Massachusetts, New Hampshire,  
7 Connecticut, Vermont, and Rhode Island.

8 (iii) GROUP 2.—Group 2 shall consist  
9 of New York, New Jersey, Puerto Rico,  
10 and the Virgin Islands.

11 (iv) GROUP 3.—Group 3 shall consist  
12 of Pennsylvania, Maryland, West Virginia,  
13 Virginia, the District of Columbia, and  
14 Delaware.

15 (v) GROUP 4.—Group 4 shall consist  
16 of Georgia, Alabama, North Carolina,  
17 South Carolina, Mississippi, Florida, Ken-  
18 tucky, and Tennessee.

19 (vi) GROUP 5.—Group 5 shall consist  
20 of Illinois, Ohio, Michigan, Indiana, Wis-  
21 consin, and Minnesota.

22 (vii) GROUP 6.—Group 6 shall consist  
23 of Texas, New Mexico, Arkansas, Okla-  
24 homa, and Louisiana.

1 (viii) GROUP 7.—Group 7 shall consist  
2 of Missouri, Iowa, Nebraska, and Kansas.

3 (ix) GROUP 8.—Group 8 shall consist  
4 of Colorado, Wyoming, North Dakota,  
5 South Dakota, Montana, and Utah.

6 (x) GROUP 9.—Group 9 shall consist  
7 of California, Guam, American Samoa,  
8 Hawaii, Nevada, and Arizona.

9 (xi) GROUP 10.—Group 10 shall con-  
10 sist of Washington, Alaska, Idaho, and Or-  
11 egon.

12 (5) MATCHING REQUIREMENT.—Subparagraphs  
13 (A) and (B) of section 21(a)(4) of the Small Busi-  
14 ness Act (15 U.S.C. 648(a)(4)) shall apply to assist-  
15 ance made available under the Efficiency Pilot Pro-  
16 gram.

17 (6) GRANT AMOUNTS.—Each small business de-  
18 velopment center selected to participate in the Effi-  
19 ciency Pilot Program under paragraph (4) shall be  
20 eligible to receive a grant in an amount equal to—

21 (A) not less than \$100,000 in each fiscal  
22 year; and

23 (B) not more than \$300,000 in each fiscal  
24 year.

1           (7) EVALUATION AND REPORT.—The Comp-  
2       troller General of the United States shall—

3           (A) not later than 30 months after the  
4       date of disbursement of the first grant under  
5       the Efficiency Pilot Program, initiate an evalua-  
6       tion of that pilot program; and

7           (B) not later than 6 months after the date  
8       of the initiation of the evaluation under sub-  
9       paragraph (A), submit to the Administrator,  
10      the Committee on Small Business and Entre-  
11      preneurship of the Senate, and the Committee  
12      on Small Business of the House of Representa-  
13      tives, a report containing—

14           (i) the results of the evaluation; and

15           (ii) any recommendations regarding  
16      whether the Efficiency Pilot Program, with  
17      or without modification, should be ex-  
18      tended to include the participation of all  
19      small business development centers.

20       (8) GUARANTEE.—The Administrator may  
21      guarantee the timely payment of a loan made to a  
22      small business concern through an on-bill financing  
23      agreement on such terms and conditions as the Ad-  
24      ministrator shall establish through a formal rule

1 making, after providing notice and an opportunity  
2 for comment.

3 (9) AUTHORIZATION OF APPROPRIATIONS.—

4 (A) IN GENERAL.—There are authorized to  
5 be appropriated from such sums as are already  
6 authorized under section 21 of the Small Busi-  
7 ness Act to carry out this subsection—

8 (i) \$5,000,000 for the first fiscal year  
9 beginning after the date of enactment of  
10 this Act; and

11 (ii) \$5,000,000 for each of the 3 fiscal  
12 years following the fiscal year described in  
13 clause (i).

14 (B) LIMITATION ON USE OF OTHER  
15 FUNDS.—The Administrator may carry out the  
16 Efficiency Pilot Program only with amounts ap-  
17 propriated in advance specifically to carry out  
18 this subsection.

19 (10) TERMINATION.—The authority under this  
20 subsection shall terminate 4 years after the date of  
21 disbursement of the first grant under the Efficiency  
22 Pilot Program.

23 (d) SMALL BUSINESS TELECOMMUTING.—

24 (1) PILOT PROGRAM.—

1 (A) IN GENERAL.—In accordance with this  
2 subsection, the Administrator shall conduct, in  
3 not more than 5 of the regions of the Adminis-  
4 tration, a pilot program to provide information  
5 regarding telecommuting to employers that are  
6 small business concerns and to encourage such  
7 employers to offer telecommuting options to  
8 employees (in this subsection referred to as the  
9 “Telecommuting Pilot Program”).

10 (B) SPECIAL OUTREACH TO INDIVIDUALS  
11 WITH DISABILITIES.—In carrying out the Tele-  
12 commuting Pilot Program, the Administrator  
13 shall make a concerted effort to provide infor-  
14 mation to—

15 (i) small business concerns owned by  
16 or employing individuals with disabilities,  
17 particularly veterans who are individuals  
18 with disabilities;

19 (ii) Federal, State, and local agencies  
20 having knowledge and expertise in assist-  
21 ing individuals with disabilities, including  
22 veterans who are individuals with disabil-  
23 ities; and

24 (iii) any group or organization, the  
25 primary purpose of which is to aid individ-



1           uals with disabilities or veterans who are  
2           individuals with disabilities.

3           (C) PERMISSIBLE ACTIVITIES.—In car-  
4           rying out the Telecommuting Pilot Program,  
5           the Administrator may—

6                   (i) produce educational materials and  
7                   conduct presentations designed to raise  
8                   awareness in the small business community  
9                   of the benefits and the ease of telecom-  
10                  muting;

11                  (ii) conduct outreach—

12                           (I) to small business concerns  
13                           that are considering offering telecom-  
14                           muting options; and

15                           (II) as provided in subparagraph  
16                           (B); and

17                           (iii) acquire telecommuting tech-  
18                           nologies and equipment to be used for  
19                           demonstration purposes.

20           (D) SELECTION OF REGIONS.—In deter-  
21           mining which regions will participate in the  
22           Telecommuting Pilot Program, the Adminis-  
23           trator shall give priority consideration to re-  
24           gions in which Federal agencies and private-sec-

1           tor employers have demonstrated a strong re-  
2           gional commitment to telecommuting.

3           (2) REPORT TO CONGRESS.—Not later than 2  
4           years after the date on which funds are first appro-  
5           priated to carry out this subsection, the Adminis-  
6           trator shall transmit to the Committee on Small  
7           Business and Entrepreneurship of the Senate and  
8           the Committee on Small Business of the House of  
9           Representatives a report containing the results of an  
10          evaluation of the Telecommuting Pilot Program and  
11          any recommendations regarding whether the pilot  
12          program, with or without modification, should be ex-  
13          tended to include the participation of all regions of  
14          the Administration.

15          (3) TERMINATION.—The Telecommuting Pilot  
16          Program shall terminate 4 years after the date on  
17          which funds are first appropriated to carry out this  
18          subsection.

19          (4) AUTHORIZATION OF APPROPRIATIONS.—  
20          There is authorized to be appropriated to the Ad-  
21          ministration \$5,000,000 to carry out this subsection.

22          (e) ENCOURAGING INNOVATION IN ENERGY EFFI-  
23          CIENCY.—Section 9 of the Small Business Act (15 U.S.C.  
24          638) is amended by adding at the end the following:

1       “(z) ENCOURAGING INNOVATION IN ENERGY EFFI-  
2   CIENCY.—

3               “(1) FEDERAL AGENCY ENERGY-RELATED PRI-  
4   ORITY.—In carrying out its duties under this section  
5   to SBIR and STTR solicitations by Federal agen-  
6   cies, the Administrator shall—

7               “(A) ensure that such agencies give high  
8       priority to small business concerns that partici-  
9       pate in or conduct energy efficiency or renew-  
10      able energy system research and development  
11      projects; and

12              “(B) include in the annual report to Con-  
13      gress under subsection (b)(7) a determination  
14      of whether the priority described in subpara-  
15      graph (A) is being carried out.

16              “(2) CONSULTATION REQUIRED.—The Adminis-  
17      trator shall consult with the heads of other Federal  
18      agencies and departments in determining whether  
19      priority has been given to small business concerns  
20      that participate in or conduct energy efficiency or  
21      renewable energy system research and development  
22      projects, as required by this section.

23              “(3) GUIDELINES.—The Administrator shall, as  
24      soon as is practicable after the date of enactment of  
25      this subsection, issue guidelines and directives to as-

1        sist Federal agencies in meeting the requirements of  
2        this section.

3            “(4) DEFINITIONS.—In this subsection—

4                    “(A) the term ‘biomass’—

5                            “(i) means any organic material that  
6                            is available on a renewable or recurring  
7                            basis, including—

8                                    “(I) agricultural crops;

9                                    “(II) trees grown for energy pro-  
10                                    duction;

11                                    “(III) wood waste and wood resi-  
12                                    dues;

13                                    “(IV) plants (including aquatic  
14                                    plants and grasses);

15                                    “(V) residues;

16                                    “(VI) fibers;

17                                    “(VII) animal wastes and other  
18                                    waste materials; and

19                                    “(VIII) fats, oils, and greases  
20                                    (including recycled fats, oils, and  
21                                    greases); and

22                                    “(ii) does not include—

23                                    “(I) paper that is commonly re-  
24                                    cycled; or

25                                    “(II) unsegregated solid waste;

1 “(B) the term ‘energy efficiency project’  
2 means the installation or upgrading of equip-  
3 ment that results in a significant reduction in  
4 energy usage; and

5 “(C) the term ‘renewable energy system’  
6 means a system of energy derived from—

7 “(i) a wind, solar, biomass (including  
8 biodiesel), or geothermal source; or

9 “(ii) hydrogen derived from biomass  
10 or water using an energy source described  
11 in clause (i).”.

12 **Subtitle F—Assisting State and**  
13 **Local Governments in Energy**  
14 **Efficiency**

15 **SEC. 271. WEATHERIZATION ASSISTANCE FOR LOW-INCOME**  
16 **PERSONS.**

17 Section 422 of the Energy Conservation and Produc-  
18 tion Act (42 U.S.C. 6872) is amended by striking  
19 “\$700,000,000 for fiscal year 2008” and inserting  
20 “\$750,000,000 for each of fiscal years 2008 through  
21 2012”.

22 **SEC. 272. STATE ENERGY CONSERVATION PLANS.**

23 Section 365(f) of the Energy Policy and Conservation  
24 Act (42 U.S.C. 6325(f)) is amended by striking “fiscal

1 year 2008” and inserting “each of fiscal years 2008  
2 through 2012”.

3 **SEC. 273. UTILITY ENERGY EFFICIENCY PROGRAMS.**

4 (a) ELECTRIC UTILITIES.—Section 111(d) of the  
5 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.  
6 2621(d)) is amended by adding at the end the following:

7 “(16) INTEGRATED RESOURCE PLANNING.—

8 Each electric utility shall—

9 “(A) integrate energy efficiency resources  
10 into utility, State, and regional plans; and

11 “(B) adopt policies establishing cost-effec-  
12 tive energy efficiency as a priority resource.

13 “(17) RATE DESIGN MODIFICATIONS TO PRO-  
14 MOTE ENERGY EFFICIENCY INVESTMENTS.—

15 “(A) IN GENERAL.—The rates allowed to  
16 be charged by any electric utility shall—

17 “(i) align utility incentives with the  
18 delivery of cost-effective energy efficiency;

19 and

20 “(ii) promote energy efficiency invest-  
21 ments.

22 “(B) POLICY OPTIONS.—In complying with  
23 subparagraph (A), each State regulatory au-  
24 thority and each nonregulated utility shall  
25 consider—

1 “(i) removing the throughput incen-  
2 tive and other regulatory and management  
3 disincentives to energy efficiency;

4 “(ii) providing utility incentives for  
5 the successful management of energy effi-  
6 ciency programs;

7 “(iii) including the impact on adoption  
8 of energy efficiency as 1 of the goals of re-  
9 tail rate design, recognizing that energy ef-  
10 ficiency must be balanced with other objec-  
11 tives;

12 “(iv) adopting rate designs that en-  
13 courage energy efficiency for each cus-  
14 tomer class; and

15 “(v) allowing timely recovery of en-  
16 ergy efficiency-related costs.”.

17 (b) NATURAL GAS UTILITIES.—Section 303(b) of the  
18 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.  
19 3203(b)) is amended by adding at the end the following:

20 “(5) ENERGY EFFICIENCY.—Each natural gas  
21 utility shall—

22 “(A) integrate energy efficiency resources  
23 into the plans and planning processes of the  
24 natural gas utility; and

1           “(B) adopt policies that establish energy  
2           efficiency as a priority resource in the plans  
3           and planning processes of the natural gas util-  
4           ity.

5           “(6) RATE DESIGN MODIFICATIONS TO PRO-  
6           MOTE ENERGY EFFICIENCY INVESTMENTS.—

7           “(A) IN GENERAL.—The rates allowed to  
8           be charged by a natural gas utility shall align  
9           utility incentives with the deployment of cost-ef-  
10          fective energy efficiency.

11          “(B) POLICY OPTIONS.—In complying with  
12          subparagraph (A), each State regulatory au-  
13          thority and each nonregulated utility shall  
14          consider—

15               “(i) separating fixed-cost revenue re-  
16               covery from the volume of transportation  
17               or sales service provided to the customer;

18               “(ii) providing to utilities incentives  
19               for the successful management of energy  
20               efficiency programs, such as allowing utili-  
21               ties to retain a portion of the cost-reducing  
22               benefits accruing from the programs;

23               “(iii) promoting the impact on adop-  
24               tion of energy efficiency as 1 of the goals  
25               of retail rate design, recognizing that en-



1                   ergy efficiency must be balanced with other  
2                   objectives; and  
3                   “(iv) adopting rate designs that en-  
4                   courage energy efficiency for each cus-  
5                   tomer class.”.

6   **SEC. 274. ENERGY EFFICIENCY AND DEMAND RESPONSE**  
7                   **PROGRAM ASSISTANCE.**

8           The Secretary shall provide technical assistance re-  
9   garding the design and implementation of the energy effi-  
10   ciency and demand response programs established under  
11   this title, and the amendments made by this title, to State  
12   energy offices, public utility regulatory commissions, and  
13   nonregulated utilities through the appropriate national  
14   laboratories of the Department of Energy.

15   **SEC. 275. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

16           Title I of the Housing and Community Development  
17   Act of 1974 (42 U.S.C. 5301 et seq.) is amended by add-  
18   ing at the end the following:

19   **“SEC. 123. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

20           “(a) DEFINITIONS.—In this section

21                   “(1) ELIGIBLE ENTITY.—The term ‘eligible en-  
22           tity’ means—

23                           “(A) a State;

24                           “(B) an eligible unit of local government  
25                   within a State; and

1 “(C) an Indian tribe.

2 “(2) ELIGIBLE UNIT OF LOCAL GOVERN-  
3 MENT.—The term ‘eligible unit of local government’  
4 means—

5 “(A) a city with a population—

6 “(i) of at least 35,000; or

7 “(ii) that causes the city to be 1 of  
8 the top 10 most populous cities of the  
9 State in which the city is located; and

10 “(B) a county with a population—

11 “(i) of at least 200,000; or

12 “(ii) that causes the county to be 1 of  
13 the top 10 most populous counties of the  
14 State in which the county is located.

15 “(3) SECRETARY.—The term ‘Secretary’ means  
16 the Secretary of Energy.

17 “(4) STATE.—The term ‘State’ means—

18 “(A) a State;

19 “(B) the District of Columbia;

20 “(C) the Commonwealth of Puerto Rico;

21 and

22 “(D) any other territory or possession of  
23 the United States.

1       “(b) PURPOSE.—The purpose of this section is to as-  
2       sist State, Indian tribal, and local governments in imple-  
3       menting strategies—

4               “(1) to reduce fossil fuel emissions created as  
5       a result of activities within the boundaries of the  
6       States or units of local government in an environ-  
7       mentally sustainable way that, to the maximum ex-  
8       tent practicable, maximizes benefits for local and re-  
9       gional communities;

10              “(2) to reduce the total energy use of the  
11       States, Indian tribes, and units of local government;  
12       and

13              “(3) to improve energy efficiency in the trans-  
14       portation sector, building sector, and any other ap-  
15       propriate sectors.

16       “(c) PROGRAM.—

17              “(1) IN GENERAL.—The Secretary shall provide  
18       to eligible entities block grants to carry out eligible  
19       activities (as specified under paragraph (2)) relating  
20       to the implementation of environmentally beneficial  
21       energy strategies.

22              “(2) ELIGIBLE ACTIVITIES.—The Secretary, in  
23       consultation with the Administrator of the Environ-  
24       mental Protection Agency, the Secretary of Trans-  
25       portation, and the Secretary of Housing and Urban

1 Development, shall establish a list of activities that  
2 are eligible for assistance under the grant program.

3 “(3) ALLOCATION TO STATES, INDIAN TRIBES,  
4 AND ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

5 “(A) IN GENERAL.—Of the amounts made  
6 available to provide grants under this sub-  
7 section, the Secretary shall allocate—

8 “(i) 68 percent to eligible units of  
9 local government;

10 “(ii) 28 percent to States; and

11 “(iii) 4 percent to Indian tribes.

12 “(B) DISTRIBUTION TO ELIGIBLE UNITS  
13 OF LOCAL GOVERNMENT.—

14 “(i) IN GENERAL.—The Secretary  
15 shall establish a formula for the distribu-  
16 tion of amounts under subparagraph (A)(i)  
17 to eligible units of local government, taking  
18 into account any factors that the Secretary  
19 determines to be appropriate, including the  
20 residential and daytime population of the  
21 eligible units of local government.

22 “(ii) CRITERIA.—Amounts shall be  
23 distributed to eligible units of local govern-  
24 ment under clause (i) only if the eligible  
25 units of local government meet the criteria

1 for distribution established by the Sec-  
2 retary for units of local government.

3 “(C) DISTRIBUTION TO STATES.—

4 “(i) IN GENERAL.—Of the amounts  
5 provided to States under subparagraph  
6 (A)(ii), the Secretary shall distribute—

7 “(I) at least 1.25 percent to each  
8 State; and

9 “(II) the remainder among the  
10 States, based on a formula, to be de-  
11 termined by the Secretary, that takes  
12 into account the population of the  
13 States and any other criteria that the  
14 Secretary determines to be appro-  
15 priate.

16 “(ii) CRITERIA.—Amounts shall be  
17 distributed to States under clause (i) only  
18 if the States meet the criteria for distribu-  
19 tion established by the Secretary for  
20 States.

21 “(iii) LIMITATION ON USE OF STATE  
22 FUNDS.—At least 40 percent of the  
23 amounts distributed to States under this  
24 subparagraph shall be used by the States  
25 for the conduct of eligible activities in non-

1 entitlement areas in the States, in accord-  
2 ance with any criteria established by the  
3 Secretary.

4 “(D) DISTRIBUTION TO INDIAN TRIBES.—

5 “(i) IN GENERAL.—The Secretary  
6 shall establish a formula for the distribu-  
7 tion of amounts under subparagraph  
8 (A)(iii) to eligible Indian tribes, taking into  
9 account any factors that the Secretary de-  
10 termines to be appropriate, including the  
11 residential and daytime population of the  
12 eligible Indian tribes.

13 “(ii) CRITERIA.—Amounts shall be  
14 distributed to eligible Indian tribes under  
15 clause (i) only if the eligible Indian tribes  
16 meet the criteria for distribution estab-  
17 lished by the Secretary for Indian tribes.

18 “(4) REPORT.—Not later than 2 years after the  
19 date on which an eligible entity first receives a grant  
20 under this section, and every 2 years thereafter, the  
21 eligible entity shall submit to the Secretary a report  
22 that describes any eligible activities carried out using  
23 assistance provided under this subsection.

24 “(5) AUTHORIZATION OF APPROPRIATIONS.—

25 There are authorized to be appropriated such sums

1 as are necessary to carry out this subsection for  
2 each of fiscal years 2008 through 2012.

3 “(d) ENVIRONMENTALLY BENEFICIAL ENERGY  
4 STRATEGIES SUPPLEMENTAL GRANT PROGRAM.—

5 “(1) IN GENERAL.—The Secretary shall provide  
6 to each eligible entity that meets the applicable cri-  
7 teria under subparagraph (B)(ii), (C)(ii), or (D)(ii)  
8 of subsection (c)(3) a supplemental grant to pay the  
9 Federal share of the total costs of carrying out an  
10 activity relating to the implementation of an environ-  
11 mentally beneficial energy strategy.

12 “(2) REQUIREMENTS.—To be eligible for a  
13 grant under paragraph (1), an eligible entity shall—

14 “(A) demonstrate to the satisfaction of the  
15 Secretary that the eligible entity meets the ap-  
16 plicable criteria under subparagraph (B)(ii),  
17 (C)(ii), or (D)(ii) of subsection (c)(3); and

18 “(B) submit to the Secretary for approval  
19 a plan that describes the activities to be funded  
20 by the grant.

21 “(3) COST-SHARING REQUIREMENT.—

22 “(A) FEDERAL SHARE.—The Federal  
23 share of the cost of carrying out any activities  
24 under this subsection shall be 75 percent.

25 “(B) NON-FEDERAL SHARE.—

1 “(i) FORM.—Not more than 50 per-  
2 cent of the non-Federal share may be in  
3 the form of in-kind contributions.

4 “(ii) LIMITATION.—Amounts provided  
5 to an eligible entity under subsection (c)  
6 shall not be used toward the non-Federal  
7 share.

8 “(4) MAINTENANCE OF EFFORT.—An eligible  
9 entity shall provide assurances to the Secretary that  
10 funds provided to the eligible entity under this sub-  
11 section will be used only to supplement, not to sup-  
12 plant, the amount of Federal, State, tribal, and local  
13 funds otherwise expended by the eligible entity for  
14 eligible activities under this subsection.

15 “(5) AUTHORIZATION OF APPROPRIATIONS.—  
16 There are authorized to be appropriated such sums  
17 as are necessary to carry out this subsection for  
18 each of fiscal years 2008 through 2012.

19 “(e) GRANTS TO OTHER STATES AND COMMU-  
20 NITIES.—

21 “(1) IN GENERAL.—Of the total amount of  
22 funds that are made available each fiscal year to  
23 carry out this section, the Secretary shall use 2 per-  
24 cent of the amount to make competitive grants  
25 under this section to States, Indian tribes, and units



1 of local government that are not eligible entities or  
2 to consortia of such units of local government.

3 “(2) APPLICATIONS.—To be eligible for a grant  
4 under this subsection, a State, Indian tribe, unit of  
5 local government, or consortia described in para-  
6 graph (1) shall apply to the Secretary for a grant  
7 to carry out an activity that would otherwise be eli-  
8 gible for a grant under subsection (c) or (d).

9 “(3) PRIORITY.—In awarding grants under this  
10 subsection, the Secretary shall give priority to—

11 “(A) States with populations of less than  
12 2,000,000; and

13 “(B) projects that would result in signifi-  
14 cant energy efficiency improvements, reductions  
15 in fossil fuel use, or capital improvements.”.

16 **SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY**  
17 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**  
18 **CATION.**

19 Part G of title III of the Energy Policy and Conserva-  
20 tion Act is amended by inserting after section 399 (42  
21 U.S.C. 371h) the following:

22 **“SEC. 399A. ENERGY SUSTAINABILITY AND EFFICIENCY**  
23 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**  
24 **CATION.**

25 “(a) DEFINITIONS.—In this section:

1           “(1) ENERGY SUSTAINABILITY.—The term ‘en-  
2       ergy sustainability’ includes using a renewable en-  
3       ergy resource and a highly efficient technology for  
4       electricity generation, transportation, heating, or  
5       cooling.

6           “(2) INSTITUTION OF HIGHER EDUCATION.—  
7       The term ‘institution of higher education’ has the  
8       meaning given the term in section 2 of the Energy  
9       Policy Act of 2005 (42 U.S.C. 15801).

10          “(b) GRANTS FOR ENERGY EFFICIENCY IMPROVE-  
11       MENT.—

12           “(1) IN GENERAL.—The Secretary shall award  
13       not more than 100 grants to institutions of higher  
14       education to carry out projects to improve energy ef-  
15       ficiency on the grounds and facilities of the institu-  
16       tion of higher education, including not less than 1  
17       grant to an institution of higher education in each  
18       State.

19           “(2) CONDITION.—As a condition of receiving a  
20       grant under this subsection, an institution of higher  
21       education shall agree to—

22           “(A) implement a public awareness cam-  
23       paign concerning the project in the community  
24       in which the institution of higher education is  
25       located; and

1           “(B) submit to the Secretary, and make  
2           available to the public, reports on any efficiency  
3           improvements, energy cost savings, and environ-  
4           mental benefits achieved as part of a project  
5           carried out under paragraph (1).

6           “(c) GRANTS FOR INNOVATION IN ENERGY SUSTAIN-  
7   ABILITY.—

8           “(1) IN GENERAL.—The Secretary shall award  
9           not more than 250 grants to institutions of higher  
10          education to engage in innovative energy sustain-  
11          ability projects, including not less than 2 grants to  
12          institutions of higher education in each State.

13          “(2) INNOVATION PROJECTS.—An innovation  
14          project carried out with a grant under this sub-  
15          section shall—

16               “(A) involve—

17                   “(i) an innovative technology that is  
18                   not yet commercially available; or

19                   “(ii) available technology in an inno-  
20                   vative application that maximizes energy  
21                   efficiency and sustainability;

22               “(B) have the greatest potential for testing  
23               or demonstrating new technologies or processes;  
24               and

1                   “(C) ensure active student participation in  
2                   the project, including the planning, implementa-  
3                   tion, evaluation, and other phases of the  
4                   project.

5                   “(3) CONDITION.—As a condition of receiving a  
6                   grant under this subsection, an institution of higher  
7                   education shall agree to submit to the Secretary,  
8                   and make available to the public, reports that de-  
9                   scribe the results of the projects carried out under  
10                  paragraph (1).

11                  “(d) AWARDING OF GRANTS.—

12                  “(1) APPLICATION.—An institution of higher  
13                  education that seeks to receive a grant under this  
14                  section may submit to the Secretary an application  
15                  for the grant at such time, in such form, and con-  
16                  taining such information as the Secretary may pre-  
17                  scribe.

18                  “(2) SELECTION.—The Secretary shall estab-  
19                  lish a committee to assist in the selection of grant  
20                  recipients under this section.

21                  “(e) ALLOCATION TO INSTITUTIONS OF HIGHER  
22                  EDUCATION WITH SMALL ENDOWMENTS.—Of the  
23                  amount of grants provided for a fiscal year under this sec-  
24                  tion, the Secretary shall provide not less 50 percent of the  
25                  amount to institutions of higher education that have an

1 endowment of not more than \$100,000,000, with 50 per-  
2 cent of the allocation set aside for institutions of higher  
3 education that have an endowment of not more than  
4 \$50,000,000.

5 “(f) GRANT AMOUNTS.—The maximum amount of  
6 grants for a project under this section shall not exceed—

7 “(1) in the case of grants for energy efficiency  
8 improvement under subsection (b), \$1,000,000; or

9 “(2) in the case of grants for innovation in en-  
10 ergy sustainability under subsection (c), \$500,000.

11 “(g) AUTHORIZATION OF APPROPRIATIONS.—There  
12 are authorized to be appropriated such sums as are nec-  
13 essary to carry out this section for each of fiscal years  
14 2008 through 2012.”.

15 **SEC. 277. ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
16 **WORKER TRAINING PROGRAM.**

17 Section 1101 of the Energy Policy Act of 2005 (42  
18 U.S.C. 16411) is amended—

19 (1) by redesignating subsection (d) as sub-  
20 section (e); and

21 (2) by inserting after subsection (c), the fol-  
22 lowing:

23 “(d) ENERGY EFFICIENCY AND RENEWABLE EN-  
24 ERGY WORKER TRAINING PROGRAM.—

1           “(1) PURPOSE.—It is the purpose of this sub-  
2       section to—

3           “(A) create a sustainable, comprehensive  
4       public program that provides quality training  
5       that is linked to jobs that are created through  
6       renewable energy and energy efficiency initia-  
7       tives;

8           “(B) satisfy industry demand for a skilled  
9       workforce, to support economic growth, to boost  
10      America’s global competitiveness in the expand-  
11      ing energy efficiency and renewable energy in-  
12      dustries, and to provide economic self-suffi-  
13      ciency and family-sustaining jobs for America’s  
14      workers, including low wage workers, through  
15      quality training and placement in job opportu-  
16      nities in the growing energy efficiency and re-  
17      newable energy industries;

18          “(C) provide grants for the safety, health,  
19      and skills training and education of workers  
20      who are, or may be engaged in, activities re-  
21      lated to the energy efficiency and renewable en-  
22      ergy industries; and

23          “(D) provide funds for national and State  
24      industry-wide research, labor market informa-  
25      tion and labor exchange programs, and the de-

1           velopment of nationally and State administered  
2           training programs.

3           “(2) GRANT PROGRAM.—

4                   “(A) IN GENERAL.—Not later than 6  
5           months after the date of enactment of this Act,  
6           the Secretary of Labor (referred to in this sub-  
7           section as the ‘Secretary’), in consultation with  
8           the Secretary of Energy, shall establish an en-  
9           ergy efficiency and renewable energy worker  
10          training program under which the Secretary  
11          shall carry out the activities described in para-  
12          graph (3) to achieve the purposes of this sub-  
13          section.

14                   “(B) ELIGIBILITY.—For purposes of pro-  
15          viding assistance and services under the pro-  
16          gram established under this subsection—

17                           “(i) target populations of individuals  
18                   eligible for training and other services shall  
19                   include, but not be limited to—

20                                   “(I) veterans, or past and  
21                                   present members of the reserve com-  
22                                   ponents of the Armed Forces;

23                                   “(II) workers affected by na-  
24                                   tional energy and environmental pol-  
25                                   icy;

1 “(III) workers displaced by the  
2 impacts of economic globalization;

3 “(IV) individuals, including at-  
4 risk youth, seeking employment path-  
5 ways out of poverty and into economic  
6 self-sufficiency;

7 “(V) formerly incarcerated, adju-  
8 dicated, non-violent offenders; and

9 “(VI) individuals in need of up-  
10 dated training related to the energy  
11 efficiency and renewable energy indus-  
12 tries; and

13 “(ii) energy efficiency and renewable  
14 energy industries eligible for such assist-  
15 ance and services shall include—

16 “(I) the energy-efficient building,  
17 construction, and retrofits industries;

18 “(II) the renewable electric power  
19 industry;

20 “(III) the energy efficient and  
21 advanced drive train vehicle industry;

22 “(IV) the bio-fuels industry; and

23 “(V) the deconstruction and ma-  
24 terials use industries.

25 “(3) ACTIVITIES.—



1           “(A) NATIONAL RESEARCH PROGRAM.—

2           Under the program established under para-  
3           graph (2), the Secretary, acting through the  
4           Bureau of Labor Statistics, shall provide assist-  
5           ance to support national research to develop  
6           labor market data and to track future work-  
7           force trends resulting from energy-related ini-  
8           tiatives carried out under this section. Activities  
9           carried out under this paragraph shall  
10          include—

11                 “(i) linking research and development  
12                 in renewable energy and energy efficiency  
13                 technology with the development of stand-  
14                 ards and curricula for current and future  
15                 jobs;

16                 “(ii) the tracking and documentation  
17                 of academic and occupational competencies  
18                 as well as future skill needs with respect to  
19                 renewable energy and energy efficiency  
20                 technology;

21                 “(iii) tracking and documentation of  
22                 occupational information and workforce  
23                 training data with respect to renewable en-  
24                 ergy and energy efficiency technology;

1                   “(iv) assessing new employment and  
2                   work practices including career ladder and  
3                   upgrade training as well as high perform-  
4                   ance work systems; and

5                   “(v) collaborating with State agencies,  
6                   industry, organized labor, and community  
7                   and nonprofit organizations to disseminate  
8                   successful innovations for labor market  
9                   services and worker training with respect  
10                  to renewable energy and energy efficiency  
11                  technology.

12                  “(B) NATIONAL ENERGY TRAINING PART-  
13                  NERSHIP GRANTS.—

14                  “(i) IN GENERAL.—Under the pro-  
15                  gram established under paragraph (2), the  
16                  Secretary shall award National Energy  
17                  Training Partnerships Grants on a com-  
18                  petitive basis to eligible entities to enable  
19                  such entities to carry out national training  
20                  that leads to economic self-sufficiency and  
21                  to develop an energy efficiency and renew-  
22                  able energy industries workforce. Grants  
23                  shall be awarded under this subparagraph  
24                  so as to ensure geographic diversity with at  
25                  least 2 grants awarded to entities located

1 in each of the 4 Petroleum Administration  
2 for Defense Districts with no subdistricts  
3 and at least 1 grant awarded to an entity  
4 located in each of the subdistricts of the  
5 Petroleum Administration for Defense Dis-  
6 trict with subdistricts.

7 “(ii) ELIGIBILITY.—To be eligible to  
8 receive a grant under clause (i), an entity  
9 shall be a non-profit partnership that—

10 “(I) includes the equal participa-  
11 tion of industry, including public or  
12 private employers, and labor organiza-  
13 tions, including joint labor-manage-  
14 ment training programs, and may in-  
15 clude community-based organizations,  
16 educational institutions, small busi-  
17 nesses, cooperatives, State and local  
18 veterans agencies, and veterans serv-  
19 ice organizations; and

20 “(II) demonstrates—

21 “(aa) experience in imple-  
22 menting and operating worker  
23 skills training and education pro-  
24 grams;

1                   “(bb) the ability to identify  
2                   and involve in training programs  
3                   carried out under this grant, tar-  
4                   get populations of workers who  
5                   are, or will be engaged in, activi-  
6                   ties related to energy efficiency  
7                   and renewable energy industries;  
8                   and

9                   “(cc) the ability to help  
10                  workers achieve economic self-  
11                  sufficiency.

12               “(iii) ACTIVITIES.—Activities to be  
13               carried out under a grant under this sub-  
14               paragraph may include—

15               “(I) the provision of occupational  
16               skills training, including curriculum  
17               development, on-the-job training, and  
18               classroom training;

19               “(II) the provision of safety and  
20               health training;

21               “(III) the provision of basic  
22               skills, literacy, GED, English as a  
23               second language, and job readiness  
24               training;

1 “(IV) individual referral and tui-  
2 tion assistance for a community col-  
3 lege training program;

4 “(V) the provision of customized  
5 training in conjunction with an exist-  
6 ing registered apprenticeship program  
7 or labor-management partnership;

8 “(VI) the provision of career lad-  
9 der and upgrade training; and

10 “(VII) the implementation of  
11 transitional jobs strategies.

12 “(C) STATE LABOR MARKET RESEARCH,  
13 INFORMATION, AND LABOR EXCHANGE RE-  
14 SEARCH PROGRAM.—

15 “(i) IN GENERAL.—Under the pro-  
16 gram established under paragraph (2), the  
17 Secretary shall award competitive grants to  
18 States to enable such States to administer  
19 labor market and labor exchange informa-  
20 tional programs that include the implemen-  
21 tation of the activities described in clause  
22 (ii).

23 “(ii) ACTIVITIES.—A State shall use  
24 amounts awarded under a grant under this  
25 subparagraph to provide funding to the

1 State agency that administers the Wagner-  
2 Peyser Act and State unemployment com-  
3 pensation programs to carry out the fol-  
4 lowing activities using State agency merit  
5 staff:

6 “(I) The identification of job  
7 openings in the renewable energy and  
8 energy efficiency sector.

9 “(II) The administration of skill  
10 and aptitude testing and assessment  
11 for workers.

12 “(III) The counseling, case man-  
13 agement, and referral of qualified job  
14 seekers to openings and training pro-  
15 grams, including energy efficiency and  
16 renewable energy training programs.

17 “(D) STATE ENERGY TRAINING PARTNER-  
18 SHIP PROGRAM.—

19 “(i) IN GENERAL.—Under the pro-  
20 gram established under paragraph (2), the  
21 Secretary shall award competitive grants to  
22 States to enable such States to administer  
23 renewable energy and energy efficiency  
24 workforce development programs that in-

1                   clude the implementation of the activities  
2                   described in clause (ii).

3                   “(ii) ACTIVITIES.—

4                   “(I) IN GENERAL.—A State shall  
5                   use amounts awarded under a grant  
6                   under this subparagraph to award  
7                   competitive grants to eligible State  
8                   Energy Sector Partnerships to enable  
9                   such Partnerships to coordinate with  
10                  existing apprenticeship and labor  
11                  management training programs and  
12                  implement training programs that  
13                  lead to the economic self-sufficiency of  
14                  trainees.

15                  “(II) ELIGIBILITY.—To be eligi-  
16                  ble to receive a grant under this sub-  
17                  paragraph, a State Energy Sector  
18                  Partnership shall—

19                  “(aa) consist of non-profit  
20                  organizations that include equal  
21                  participation from industry, in-  
22                  cluding public or private non-  
23                  profit employers, and labor orga-  
24                  nizations, including joint labor-  
25                  management training programs,

1 and may include representatives  
2 from local governments, worker  
3 investment agency one-stop ca-  
4 reer centers, community based  
5 organizations, community col-  
6 leges, other post-secondary insti-  
7 tutions, small businesses, co-  
8 operatives, State and local vet-  
9 erans agencies, and veterans  
10 service organizations;

11 “(bb) demonstrate experi-  
12 ence in implementing and oper-  
13 ating worker skills training and  
14 education programs; and

15 “(cc) demonstrate the ability  
16 to identify and involve in training  
17 programs, target populations of  
18 workers who are, or will be en-  
19 gaged in, activities related to en-  
20 ergy efficiency and renewable en-  
21 ergy industries.

22 “(iii) PRIORITY.—In awarding grants  
23 under this subparagraph, the Secretary  
24 shall give priority to States that dem-



1           onstrate linkages of activities under the  
2           grant with—

3                   “(I) meeting national energy poli-  
4                   cies associated with energy efficiency,  
5                   renewable energy, and the reduction  
6                   of emissions of greenhouse gases; and

7                   “(II) meeting State energy poli-  
8                   cies associated with energy efficiency,  
9                   renewable energy, and the reduction  
10                  of emissions of greenhouse gases.

11                  “(iv) COORDINATION.—A grantee  
12                  under this subparagraph shall coordinate  
13                  activities carried out under the grant with  
14                  existing apprenticeship and labor manage-  
15                  ment training programs and implement  
16                  training programs that lead to the eco-  
17                  nomic self-sufficiency of trainees, including  
18                  providing—

19                   “(I) outreach and recruitment  
20                   services, in coordination with the ap-  
21                   propriate State agency;

22                   “(II) occupational skills training,  
23                   including curriculum development, on-  
24                   the-job training, and classroom train-  
25                   ing;

1 “(III) safety and health training;

2 “(IV) basic skills, literacy, GED,  
3 English as a second language, and job  
4 readiness training;

5 “(V) individual referral and tui-  
6 tion assistance for a community col-  
7 lege training program;

8 “(VI) customized training in con-  
9 junction with an existing registered  
10 apprenticeship program or labor-man-  
11 agement partnership;

12 “(VII) career ladder and upgrade  
13 training; and

14 “(VIII) services under transi-  
15 tional jobs strategies.

16 “(4) WORKER PROTECTIONS AND NON-  
17 DISCRIMINATION REQUIREMENTS.—

18 “(A) APPLICATION OF WIA.—The provi-  
19 sions of sections 181 and 188 of the Workforce  
20 Investment Act of 1998 (29 U.S.C. 2931 and  
21 2938) shall apply to all programs carried out  
22 with assistance under this subsection.

23 “(B) CONSULTATION WITH LABOR ORGANI-  
24 ZATIONS.—If a labor organization represents a  
25 substantial number of workers who are engaged

1 in similar work or training in an area that is  
2 the same as the area that is proposed to be  
3 funded under this subsection, the labor organi-  
4 zation shall be provided an opportunity to be  
5 consulted and to submit comments in regard to  
6 such a proposal.

7 “(5) AUTHORIZATION OF APPROPRIATIONS.—  
8 There is authorized to be appropriated to carry out  
9 this subsection, \$100,000,000 for each fiscal year, of  
10 which—

11 “(A) not to exceed 20 percent of the  
12 amount appropriated in each fiscal year shall be  
13 made available for, and shall be equally divided  
14 between, national labor market research and in-  
15 formation under paragraph (3)(A) and State  
16 labor market information and labor exchange  
17 research under paragraph (3)(C); and

18 “(B) the remainder shall be divided equally  
19 between National Energy Partnership Training  
20 Grants under paragraph (3)(B) and State en-  
21 ergy training partnership grants under para-  
22 graph (3)(D).

23 “(6) DEFINITION.—In this subsection, the term  
24 ‘renewable electric power’ has the meaning given the

1 term ‘renewable energy’ in section 203(b)(2) of the  
2 Energy Policy Act of 2005 (Public Law 109–58).”.

3 **SEC. 278. ASSISTANCE TO STATES TO REDUCE SCHOOL BUS**  
4 **IDLING.**

5 (a) STATEMENT OF POLICY.—Congress encourages  
6 each local educational agency (as defined in section  
7 9101(26) of the Elementary and Secondary Education Act  
8 of 1965 (20 U.S.C. 7801(26))) that receives Federal funds  
9 under the Elementary and Secondary Education Act of  
10 1965 (20 U.S.C. 6301 et seq.) to develop a policy to re-  
11 duce the incidence of school bus idling at schools while  
12 picking up and unloading students.

13 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
14 are authorized to be appropriated to the Secretary, work-  
15 ing in coordination with the Secretary of Education,  
16 \$5,000,000 for each of fiscal years 2007 through 2012  
17 for use in educating States and local education agencies  
18 about—

- 19 (1) benefits of reducing school bus idling; and  
20 (2) ways in which school bus idling may be re-  
21 duced.

22 **SEC. 279. DEFINITION OF STATE.**

23 Section 412 of the Energy Conservation and Produc-  
24 tion Act (42 U.S.C. 6862) is amended by striking para-  
25 graph (8) and inserting the following:

1 “(8) STATE.—The term ‘State’ means—

2 “(A) a State;

3 “(B) the District of Columbia; and

4 “(C) the Commonwealth of Puerto Rico.”.

5 **SEC. 280. COORDINATION OF PLANNED REFINERY OUT-**  
6 **AGES.**

7 (a) DEFINITIONS.—In this section:

8 (1) ADMINISTRATOR.—The term “Adminis-  
9 trator” means the Administrator of the Energy In-  
10 formation Administration.

11 (2) PLANNED REFINERY OUTAGE.—

12 (A) IN GENERAL.—The term “planned re-  
13 finery outage” means a removal, scheduled be-  
14 fore the date on which the removal occurs, of  
15 a refinery, or any unit of a refinery, from serv-  
16 ice for maintenance, repair, or modification.

17 (B) EXCLUSION.—The term “planned re-  
18 finery outage” does not include any necessary  
19 and unplanned removal of a refinery, or any  
20 unit of a refinery, from service as a result of a  
21 component failure, safety hazard, emergency, or  
22 action reasonably anticipated to be necessary to  
23 prevent such events.

24 (3) REFINED PETROLEUM PRODUCT.—The  
25 term “refined petroleum product” means any gaso-

1 line, diesel fuel, fuel oil, lubricating oil, liquid petro-  
2 leum gas, or other petroleum distillate that is pro-  
3 duced through the refining or processing of crude oil  
4 or an oil derived from tar sands, shale, or coal.

5 (4) REFINERY.—The term “refinery” means a  
6 facility used in the production of a refined petroleum  
7 product through distillation, cracking, or any other  
8 process.

9 (5) SECRETARY.—The term “Secretary” means  
10 the Secretary of Energy.

11 (b) REVIEW AND ANALYSIS OF AVAILABLE INFORMA-  
12 TION.—The Administrator shall, on an ongoing basis—

13 (1) review information on planned refinery out-  
14 ages that is available from commercial reporting  
15 services;

16 (2) analyze that information to determine  
17 whether the scheduling of a planned refinery outage  
18 may nationally or regionally affect the price or sup-  
19 ply of any refined petroleum product by—

20 (A) decreasing the production of the re-  
21 fined petroleum product; and

22 (B) causing or contributing to a retail or  
23 wholesale supply shortage or disruption;

24 (3) not less frequently than twice each year,  
25 submit to the Secretary a report describing the re-

1       sults of the review and analysis under paragraphs  
2       (1) and (2); and

3           (4) specifically alert the Secretary of any  
4       planned refinery outage that the Administrator de-  
5       termines may nationally or regionally affect the price  
6       or supply of a refined petroleum product.

7       (c) ACTION BY SECRETARY.—On a determination by  
8       the Secretary, based on a report or alert under paragraph  
9       (3) or (4) of subsection (b), that a planned refinery outage  
10      may affect the price or supply of a refined petroleum prod-  
11      uct, the Secretary shall make available to refinery opera-  
12      tors information on planned refinery outages to encourage  
13      reductions of the quantity of refinery capacity that is out  
14      of service at any time.

15      (d) LIMITATION.—Nothing in this section shall alter  
16      any existing legal obligation or responsibility of a refinery  
17      operator, or create any legal right of action, nor shall this  
18      section authoirze the Secretary—

19           (1) to prohibit a refinery operator from con-  
20      ducting a planned refinery outage; or

21           (2) to require a refinery operator to continue to  
22      operate a refinery.

1 **SEC. 281. TECHNICAL CRITERIA FOR CLEAN COAL POWER**  
2 **INITIATIVE.**

3 Section 402(b)(1)(B)(ii) of the Energy Policy Act of  
4 2005 (42 U.S.C. 15962(b)(1)(B)(ii)) is amended by strik-  
5 ing subclause (I) and inserting the following:

6 “(I)(aa) to remove at least 99  
7 percent of sulfur dioxide; or  
8 “(bb) to emit not more than 0.04  
9 pound SO<sub>2</sub> per million Btu, based on  
10 a 30-day average;”.

11 **SEC. 282. ADMINISTRATION.**

12 Section 106 of the Alaska Natural Gas Pipeline Act  
13 (15 U.S.C. 720d) is amended by adding at the end the  
14 following:

15 “(h) ADMINISTRATION.—

16 “(1) PERSONNEL APPOINTMENTS.—

17 “(A) IN GENERAL.—The Federal Coordi-  
18 nator may appoint and terminate such per-  
19 sonnel as the Federal Coordinator determines  
20 to be appropriate.

21 “(B) AUTHORITY OF FEDERAL COORDI-  
22 NATOR.—Personnel appointed by the Federal  
23 Coordinator under subparagraph (A) shall be  
24 appointed without regard to the provisions of  
25 title 5, United States Code, governing appoint-  
26 ments in the competitive service.



1 “(2) COMPENSATION.—

2 “(A) IN GENERAL.—Subject to subpara-  
3 graph (B), personnel appointed by the Federal  
4 Coordinator under paragraph (1)(A) shall be  
5 paid without regard to the provisions of chapter  
6 51 and subchapter III of chapter 53 of title 5,  
7 United States Code (relating to classification  
8 and General Schedule pay rates).

9 “(B) MAXIMUM LEVEL OF COMPENSA-  
10 TION.—The rate of pay for personnel appointed  
11 by the Federal Coordinator under paragraph  
12 (1)(A) shall not exceed the maximum level of  
13 rate payable for level III of the Executive  
14 Schedule.

15 “(C) APPLICABILITY OF SECTION 5941.—  
16 Section 5941 of title 5, United States Code,  
17 shall apply to personnel appointed by the Fed-  
18 eral Coordinator under paragraph (1)(A).

19 “(3) TEMPORARY SERVICES.—

20 “(A) IN GENERAL.—The Federal Coordi-  
21 nator may procure temporary and intermittent  
22 services in accordance with section 3109(b) of  
23 title 5, United States Code.

24 “(B) MAXIMUM LEVEL OF COMPENSA-  
25 TION.—The level of compensation of an indi-

1           vidual employed on a temporary or intermittent  
2           basis under subparagraph (A) shall not exceed  
3           the maximum level of rate payable for level III  
4           of the Executive Schedule.

5           “(4) FEES, CHARGES, AND COMMISSIONS.—

6                   “(A) IN GENERAL.—The Federal Coordi-  
7           nator shall have the authority to establish,  
8           change, and abolish reasonable filing and serv-  
9           ice fees, charges, and commissions, require de-  
10          posits of payments, and provide refunds as pro-  
11          vided to the Secretary of the Interior in section  
12          304 of the Federal Land Policy and Manage-  
13          ment Act of 1976 (43 U.S.C. 1734), except  
14          that the authority shall be with respect to the  
15          duties of the Federal Coordinator, as delineated  
16          in the Alaska Natural Gas Pipeline Act (15  
17          U.S.C. 720 et seq.), as amended.

18                   “(B) AUTHORITY OF SECRETARY OF THE  
19          INTERIOR.—Subparagraph (A) shall not affect  
20          the authority of the Secretary of the Interior to  
21          establish, change, and abolish reasonable filing  
22          and service fees, charges, and commissions, re-  
23          quire deposits of payments, and provide refunds  
24          under section 304 of the Federal Land Policy

1 and Management Act of 1976 (43 U.S.C.  
2 1734).

3 “(C) USE OF FUNDS.—The Federal Coor-  
4 dinator is authorized to use, without further ap-  
5 propriation, amounts collected under subpara-  
6 graph (A) to carry out this section.”.

7 **SEC. 283. OFFSHORE RENEWABLE ENERGY.**

8 (a) LEASES, EASEMENTS, OR RIGHTS-OF-WAY FOR  
9 ENERGY AND RELATED PURPOSES.—Section 8(p) of the  
10 Outer Continental Shelf Lands Act (43 U.S.C. 1337(p))  
11 is amended—

12 (1) by inserting after “Secretary of the Depart-  
13 ment in which the Coast Guard is operating” the  
14 following: “, the Secretary of Commerce,”;

15 (2) by striking paragraph (3) and inserting the  
16 following:

17 “(3) COMPETITIVE OR NONCOMPETITIVE  
18 BASIS.—Any lease, easement, or right-of-way under  
19 paragraph (1) shall be issued on a competitive basis,  
20 unless—

21 “(A) the lease, easement, or right-of-way  
22 relates to a project that meets the criteria es-  
23 tablished under section 388(d) of the Energy  
24 Policy Act of 2005 (43 U.S.C. 1337 note; Pub-  
25 lic Law 109–58);

1 “(B) the lease, easement, or right-of-way—

2 “(i) is for the placement and oper-  
3 ation of a meteorological or marine data  
4 collection facility; and

5 “(ii) has a term of not more than 5  
6 years; or

7 “(C) the Secretary determines, after pro-  
8 viding public notice of a proposed lease, ease-  
9 ment, or right-of-way, that no competitive inter-  
10 est exists.”; and

11 (3) by adding at the end the following:

12 “(11) CLARIFICATION.—

13 “(A) IN GENERAL.—Subject to subpara-  
14 graph (B), the Federal Energy Regulatory  
15 Commission shall not have authority to approve  
16 or license a wave or current energy project on  
17 the outer Continental Shelf under part I of the  
18 Federal Power Act (16 U.S.C. 792 et seq.)

19 “(B) TRANSMISSION OF POWER.—Sub-  
20 paragraph (A) shall not affect any authority of  
21 the Commission with respect to the trans-  
22 mission of power generated from a project de-  
23 scribed in subparagraph (A).”.

24 (b) CONSIDERATION OF CERTAIN REQUESTS FOR  
25 AUTHORIZATION.—In considering a request for authoriza-

1 tion of a project pending before the Commission on the  
2 outer Continental Shelf as of the date of enactment of this  
3 Act, the Secretary of the Interior shall rely, to the max-  
4 imum extent practicable, on the materials submitted to the  
5 Commission before that date.

6 (c) SAVINGS PROVISION.—Nothing in this section or  
7 an amendment made by this section requires the resubmis-  
8 sion of any document that was previously submitted, or  
9 the reauthorization of any action that was previously au-  
10 thorized, with respect to a project on the outer Continental  
11 Shelf, for which a preliminary permit was issued by the  
12 Commission before the date of enactment of this Act.

13 **Subtitle G—Marine and**  
14 **Hydrokinetic Renewable Energy**  
15 **Promotion**

16 **SEC. 291. DEFINITION OF MARINE AND HYDROKINETIC RE-**  
17 **NEWABLE ENERGY.**

18 (a) IN GENERAL.—In this subtitle, the term “marine  
19 and hydrokinetic renewable energy” means electrical en-  
20 ergy from—

- 21 (1) waves, tides, and currents in oceans, estu-  
22 aries, and tidal areas;  
23 (2) free flowing water in rivers, lakes, and  
24 streams;

- 1           (3) free flowing water in man-made channels,  
2           including projects that utilize nonmechanical struc-  
3           tures to accelerate the flow of water for electric  
4           power production purposes; and  
5           (4) differentials in ocean temperature (ocean  
6           thermal energy conversion).

7           (b) EXCLUSION.—Except as provided in subsection  
8           (a)(3), the term “marine and hydrokinetic renewable en-  
9           ergy” does not include energy from any source that uses  
10          a dam, diversionary structure, or impoundment for electric  
11          power purposes.

12   **SEC. 292. RESEARCH AND DEVELOPMENT.**

13          (a) PROGRAM.—The Secretary, in consultation with  
14          the Secretary of Commerce and the Secretary of the Inte-  
15          rior, shall establish a program of marine and hydrokinetic  
16          renewable energy research, including—

- 17               (1) developing and demonstrating marine and  
18               hydrokinetic renewable energy technologies;  
19               (2) reducing the manufacturing and operation  
20               costs of marine and hydrokinetic renewable energy  
21               technologies;  
22               (3) increasing the reliability and survivability of  
23               marine and hydrokinetic renewable energy facilities;  
24               (4) integrating marine and hydrokinetic renew-  
25               able energy into electric grids;

1           (5) identifying opportunities for cross fertiliza-  
2           tion and development of economies of scale between  
3           offshore wind and marine and hydrokinetic renew-  
4           able energy sources;

5           (6) identifying, in conjunction with the Sec-  
6           retary of Commerce and the Secretary of the Inte-  
7           rior, the potential environmental impacts of marine  
8           and hydrokinetic renewable energy technologies and  
9           measures to minimize or prevent adverse impacts,  
10          and technologies and other means available for mon-  
11          itoring and determining environmental impacts;

12          (7) identifying, in conjunction with the Com-  
13          mandant of the United States Coast Guard, the po-  
14          tential navigational impacts of marine and  
15          hydrokinetic renewable energy technologies and  
16          measures to minimize or prevent adverse impacts;

17          (8) standards development, demonstration, and  
18          technology transfer for advanced systems engineer-  
19          ing and system integration methods to identify crit-  
20          ical interfaces; and

21          (9) providing public information and oppor-  
22          tunity for public comment concerning all tech-  
23          nologies.

24          (b) REPORT.—Not later than 18 months after the  
25          date of enactment of this Act, the Secretary, in consulta-

1 tion with the Secretary of Commerce and the Secretary  
2 of the Interior, shall provide to the appropriate committees  
3 of Congress a report that addresses—

4 (1) the potential environmental impacts of  
5 hydrokinetic renewable energy technologies in free-  
6 flowing water in rivers, lakes, and streams;

7 (2) the means by which to minimize or prevent  
8 any adverse environmental impacts;

9 (3) the potential role of monitoring and adapt-  
10 ive management in addressing any adverse environ-  
11 mental impacts; and

12 (4) the necessary components of such an adapt-  
13 ive management program.

14 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
15 are authorized to be appropriated to the Secretary to carry  
16 out this section \$50,000,000 for each of the fiscal years  
17 2008 through 2017.

18 **SEC. 293. NATIONAL OCEAN ENERGY RESEARCH CENTERS.**

19 (a) IN GENERAL.—Subject to the availability of ap-  
20 propriations under subsection (e), the Secretary shall es-  
21 tablish not less than 1, and not more than 6, national  
22 ocean energy research centers at institutions of higher  
23 education for the purpose of conducting research, develop-  
24 ment, demonstration, and testing of ocean energy tech-  
25 nologies and associated equipment.



1 (b) EVALUATIONS.—Each Center shall (in consulta-  
2 tion with developers, utilities, and manufacturers) conduct  
3 evaluations of technologies and equipment described in  
4 subsection (a).

5 (c) LOCATION.—In establishing centers under this  
6 section, the Secretary shall locate the centers in coastal  
7 regions of the United State in a manner that, to the max-  
8 imum extent practicable, is geographically dispersed.

9 (d) COORDINATION.—Prior to carrying out any activ-  
10 ity under this section in waters subject to the jurisdiction  
11 of the United States, the Secretary shall identify, in con-  
12 junction with the Secretary of Commerce and the Sec-  
13 retary of Interior, the potential environmental impacts of  
14 such activity and measures to minimize or prevent adverse  
15 impacts.

16 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
17 are authorized to be appropriate such sums as are nec-  
18 essary to carry out this section.

19 **TITLE III—CARBON CAPTURE**  
20 **AND STORAGE RESEARCH,**  
21 **DEVELOPMENT, AND DEM-**  
22 **ONSTRATION**

23 **SEC. 301. SHORT TITLE.**

24 This title may be cited as the “Carbon Capture and  
25 Sequestration Act of 2007”.

1   **SEC. 302. CARBON CAPTURE AND STORAGE RESEARCH, DE-**  
2                   **VELOPMENT, AND DEMONSTRATION PRO-**  
3                   **GRAM.**

4       Section 963 of the Energy Policy Act of 2005 (42  
5   U.S.C. 16293) is amended—

6           (1) in the section heading, by striking “**RE-**  
7           **SEARCH AND DEVELOPMENT**” and inserting  
8           “**AND STORAGE RESEARCH, DEVELOPMENT,**  
9           **AND DEMONSTRATION**”;

10          (2) in subsection (a)—

11               (A) by striking “research and develop-  
12               ment” and inserting “and storage research, de-  
13               velopment, and demonstration”; and

14               (B) by striking “capture technologies on  
15               combustion-based systems” and inserting “cap-  
16               ture and storage technologies related to energy  
17               systems”;

18          (3) in subsection (b)—

19               (A) in paragraph (3), by striking “and” at  
20               the end;

21               (B) in paragraph (4), by striking the pe-  
22               riod at the end and inserting “; and”; and

23               (C) by adding at the end the following:

24                   “(5) to expedite and carry out large-scale test-  
25                   ing of carbon sequestration systems in a range of ge-  
26                   ological formations that will provide information on

1 the cost and feasibility of deployment of sequestra-  
2 tion technologies.”; and

3 (4) by striking subsection (c) and inserting the  
4 following:

5 “(c) PROGRAMMATIC ACTIVITIES.—

6 “(1) ENERGY RESEARCH AND DEVELOPMENT  
7 UNDERLYING CARBON CAPTURE AND STORAGE  
8 TECHNOLOGIES AND CARBON USE ACTIVITIES.—

9 “(A) IN GENERAL.—The Secretary shall  
10 carry out fundamental science and engineering  
11 research (including laboratory-scale experi-  
12 ments, numeric modeling, and simulations) to  
13 develop and document the performance of new  
14 approaches to capture and store, recycle, or  
15 reuse carbon dioxide.

16 “(B) PROGRAM INTEGRATION.—The Sec-  
17 retary shall ensure that fundamental research  
18 carried out under this paragraph is appro-  
19 priately applied to energy technology develop-  
20 ment activities, the field testing of carbon se-  
21 questration, and carbon use activities,  
22 including—

23 “(i) development of new or improved  
24 technologies for the capture and storage of  
25 carbon dioxide;

1 “(ii) development of new or improved  
2 technologies that reduce the cost and in-  
3 crease the efficacy of advanced compres-  
4 sion of carbon dioxide required for the  
5 storage of carbon dioxide;

6 “(iii) modeling and simulation of geo-  
7 logical sequestration field demonstrations;

8 “(iv) quantitative assessment of risks  
9 relating to specific field sites for testing of  
10 sequestration technologies;

11 “(v) research and development of new  
12 and improved technologies for—

13 “(I) carbon use, including recy-  
14 cling and reuse of carbon dioxide; and

15 “(II) the containment of carbon  
16 dioxide in the form of solid materials  
17 or products derived from a gasifi-  
18 cation technology that does not in-  
19 volve geologic containment or injec-  
20 tion; and

21 “(vi) research and development of new  
22 and improved technologies for oxygen sepa-  
23 ration from air.

24 “(2) FIELD VALIDATION TESTING ACTIVI-  
25 TIES.—

1           “(A) IN GENERAL.—The Secretary shall  
2           promote, to the maximum extent practicable,  
3           regional carbon sequestration partnerships to  
4           conduct geologic sequestration tests involving  
5           carbon dioxide injection and monitoring, mitiga-  
6           tion, and verification operations in a variety of  
7           candidate geological settings, including—

8                   “(i) operating oil and gas fields;

9                   “(ii) depleted oil and gas fields;

10                  “(iii) unmineable coal seams;

11                  “(iv) deep saline formations;

12                  “(v) deep geological systems that may  
13                  be used as engineered reservoirs to extract  
14                  economical quantities of heat from geo-  
15                  thermal resources of low permeability or  
16                  porosity;

17                  “(vi) deep geologic systems containing  
18                  basalt formations; and

19                  “(vii) coal-bed methane recovery.

20           “(B) OBJECTIVES.—The objectives of tests  
21           conducted under this paragraph shall be—

22                   “(i) to develop and validate geo-  
23                   physical tools, analysis, and modeling to  
24                   monitor, predict, and verify carbon dioxide  
25                   containment;

1 “(ii) to validate modeling of geological  
2 formations;

3 “(iii) to refine storage capacity esti-  
4 mated for particular geological formations;

5 “(iv) to determine the fate of carbon  
6 dioxide concurrent with and following in-  
7 jection into geological formations;

8 “(v) to develop and implement best  
9 practices for operations relating to, and  
10 monitoring of, injection and storage of car-  
11 bon dioxide in geologic formations;

12 “(vi) to assess and ensure the safety  
13 of operations related to geological storage  
14 of carbon dioxide; and

15 “(vii) to allow the Secretary to pro-  
16 mulgate policies, procedures, requirements,  
17 and guidance to ensure that the objectives  
18 of this subparagraph are met in large-scale  
19 testing and deployment activities for car-  
20 bon capture and storage that are funded  
21 by the Department of Energy.

22 “(3) LARGE-SCALE TESTING AND DEPLOY-  
23 MENT.—

24 “(A) IN GENERAL.—The Secretary shall  
25 conduct not less than 7 initial large-volume se-

1           questration tests involving at least 1,000,000  
2           tons of carbon dioxide per year for geological  
3           containment of carbon dioxide (at least 1 of  
4           which shall be international in scope) to collect  
5           and validate information on the cost and feasi-  
6           bility of commercial deployment of technologies  
7           for geological containment of carbon dioxide.

8           “(B) DIVERSITY OF FORMATIONS TO BE  
9           STUDIED.—In selecting formations for study  
10          under this paragraph, the Secretary shall con-  
11          sider a variety of geological formations across  
12          the United States, and require characterization  
13          and modeling of candidate formations, as deter-  
14          mined by the Secretary.

15          “(4) PREFERENCE IN PROJECT SELECTION  
16          FROM MERITORIOUS PROPOSALS.—In making com-  
17          petitive awards under this subsection, subject to the  
18          requirements of section 989, the Secretary shall give  
19          preference to proposals from partnerships among in-  
20          dustrial, academic, and government entities.

21          “(5) COST SHARING.—Activities under this sub-  
22          section shall be considered research and development  
23          activities that are subject to the cost-sharing re-  
24          quirements of section 988(b).

1 “(6) PROGRAM REVIEW AND REPORT.—During  
2 fiscal year 2011, the Secretary shall—

3 “(A) conduct a review of programmatic ac-  
4 tivities carried out under this subsection; and

5 “(B) make recommendations with respect  
6 to continuation of the activities.

7 “(d) AUTHORIZATION OF APPROPRIATIONS.—There  
8 are authorized to be appropriated to carry out this  
9 section—

10 “(1) \$150,000,000 for fiscal year 2008;

11 “(2) \$200,000,000 for fiscal year 2009;

12 “(3) \$200,000,000 for fiscal year 2010;

13 “(4) \$180,000,000 for fiscal year 2011; and

14 “(5) \$165,000,000 for fiscal year 2012.”.

15 **SEC. 303. CARBON DIOXIDE STORAGE CAPACITY ASSESS-**  
16 **MENT.**

17 (a) DEFINITIONS.—In this section

18 (1) ASSESSMENT.—The term “assessment”  
19 means the national assessment of capacity for car-  
20 bon dioxide completed under subsection (f).

21 (2) CAPACITY.—The term “capacity” means the  
22 portion of a storage formation that can retain car-  
23 bon dioxide in accordance with the requirements (in-  
24 cluding physical, geological, and economic require-



1       ments) established under the methodology developed  
2       under subsection (b).

3           (3) ENGINEERED HAZARD.—The term “engi-  
4       neered hazard” includes the location and completion  
5       history of any well that could affect potential stor-  
6       age.

7           (4) RISK.—The term “risk” includes any risk  
8       posed       by       geomechanical,       geochemical,  
9       hydrogeological, structural, and engineered hazards.

10          (5) SECRETARY.—The term “Secretary” means  
11       the Secretary of the Interior, acting through the Di-  
12       rector of the United States Geological Survey.

13          (6) STORAGE FORMATION.—The term “storage  
14       formation” means a deep saline formation,  
15       unmineable coal seam, or oil or gas reservoir that is  
16       capable of accommodating a volume of industrial  
17       carbon dioxide.

18       (b) METHODOLOGY.—Not later than 1 year after the  
19       date of enactment of this Act, the Secretary shall develop  
20       a methodology for conducting an assessment under sub-  
21       section (f), taking into consideration—

22           (1) the geographical extent of all potential stor-  
23       age formations in all States;

24           (2) the capacity of the potential storage forma-  
25       tions;

1           (3) the injectivity of the potential storage for-  
2           mations;

3           (4) an estimate of potential volumes of oil and  
4           gas recoverable by injection and storage of industrial  
5           carbon dioxide in potential storage formations;

6           (5) the risk associated with the potential stor-  
7           age formations; and

8           (6) the work done to develop the Carbon Se-  
9           questration Atlas of the United States and Canada  
10          that was completed by the Department of Energy.

11         (c) COORDINATION.—

12           (1) FEDERAL COORDINATION.—

13                 (A) CONSULTATION.—The Secretary shall  
14                 consult with the Secretary of Energy and the  
15                 Administrator of the Environmental Protection  
16                 Agency on issues of data sharing, format, devel-  
17                 opment of the methodology, and content of the  
18                 assessment required under this title to ensure  
19                 the maximum usefulness and success of the as-  
20                 sessment.

21                 (B) COOPERATION.—The Secretary of En-  
22                 ergy and the Administrator shall cooperate with  
23                 the Secretary to ensure, to the maximum extent  
24                 practicable, the usefulness and success of the  
25                 assessment.

1           (2) STATE COORDINATION.—The Secretary  
2       shall consult with State geological surveys and other  
3       relevant entities to ensure, to the maximum extent  
4       practicable, the usefulness and success of the assess-  
5       ment.

6       (d) EXTERNAL REVIEW AND PUBLICATION.—On  
7       completion of the methodology under subsection (b), the  
8       Secretary shall—

9           (1) publish the methodology and solicit com-  
10      ments from the public and the heads of affected  
11      Federal and State agencies;

12          (2) establish a panel of individuals with exper-  
13      tise in the matters described in paragraphs (1)  
14      through (5) of subsection (b) composed, as appro-  
15      priate, of representatives of Federal agencies, insti-  
16      tutions of higher education, nongovernmental organi-  
17      zations, State organizations, industry, and inter-  
18      national geoscience organizations to review the  
19      methodology and comments received under para-  
20      graph (1); and

21          (3) on completion of the review under para-  
22      graph (2), publish in the Federal Register the re-  
23      vised final methodology.

24       (e) PERIODIC UPDATES.—The methodology devel-  
25      oped under this section shall be updated periodically (in-

1 cluding at least once every 5 years) to incorporate new  
2 data as the data becomes available.

3 (f) NATIONAL ASSESSMENT.—

4 (1) IN GENERAL.—Not later than 2 years after  
5 the date of publication of the methodology under  
6 subsection (d)(1), the Secretary, in consultation with  
7 the Secretary of Energy and State geological sur-  
8 veys, shall complete a national assessment of capac-  
9 ity for carbon dioxide in accordance with the meth-  
10 odology.

11 (2) GEOLOGICAL VERIFICATION.—As part of  
12 the assessment under this subsection, the Secretary  
13 shall carry out a drilling program to supplement the  
14 geological data relevant to determining storage ca-  
15 pacity of carbon dioxide in geological storage forma-  
16 tions, including—

17 (A) well log data;

18 (B) core data; and

19 (C) fluid sample data.

20 (3) PARTNERSHIP WITH OTHER DRILLING PRO-  
21 GRAMS.—As part of the drilling program under  
22 paragraph (2), the Secretary shall enter, as appro-  
23 priate, into partnerships with other entities to collect  
24 and integrate data from other drilling programs rel-

1       evant to the storage of carbon dioxide in geologic  
2       formations.

3               (4) INCORPORATION INTO NATCARB.—

4                       (A) IN GENERAL.—On completion of the  
5       assessment, the Secretary of Energy and the  
6       Secretary of the Interior shall incorporate the  
7       results of the assessment using—

8                               (i) the NatCarb database, to the max-  
9       imum extent practicable; or

10                              (ii) a new database developed by the  
11       Secretary of Energy, as the Secretary of  
12       Energy determines to be necessary.

13               (B) RANKING.—The database shall include  
14       the data necessary to rank potential storage  
15       sites for capacity and risk, across the United  
16       States, within each State, by formation, and  
17       within each basin.

18               (5) REPORT.—Not later than 180 days after  
19       the date on which the assessment is completed, the  
20       Secretary shall submit to the Committee on Energy  
21       and Natural Resources of the Senate and the Com-  
22       mittee on Science and Technology of the House of  
23       Representatives a report describing the findings  
24       under the assessment.

1           (6) PERIODIC UPDATES.—The national assess-  
2           ment developed under this section shall be updated  
3           periodically (including at least once every 5 years) to  
4           support public and private sector decisionmaking.

5           (g) AUTHORIZATION OF APPROPRIATIONS.—There is  
6           authorized to be appropriated to carry out this section  
7           \$30,000,000 for the period of fiscal years 2008 through  
8           2012.

9   **SEC. 304. CARBON CAPTURE AND STORAGE INITIATIVE.**

10          (a) DEFINITIONS.—In this section:

11               (1) INDUSTRIAL SOURCES OF CARBON DIOX-  
12               IDE.—The term “industrial sources of carbon diox-  
13               ide” means one or more facilities to—

14                       (A) generate electric energy from fossil  
15                       fuels;

16                       (B) refine petroleum;

17                       (C) manufacture iron or steel;

18                       (D) manufacture cement or cement clinker;

19                       (E) manufacture commodity chemicals (in-  
20                       cluding from coal gasification);

21                       (F) manufacture transportation fuels from  
22                       coal; or

23                       (G) manufacture biofuels.

24               (2) SECRETARY.—The term “Secretary” means  
25               the Secretary of Energy.

1 (b) PROGRAM ESTABLISHMENT.—

2 (1) IN GENERAL.—The Secretary shall carry  
3 out a program to demonstrate technologies for the  
4 large-scale capture of carbon dioxide from industrial  
5 sources of carbon dioxide.

6 (2) SCOPE OF AWARD.—An award under this  
7 section shall be only for the portion of the project  
8 that—

9 (A) carries out the large-scale capture (in-  
10 cluding purification and compression) of carbon  
11 dioxide;

12 (B) provides for the cost of transportation  
13 and injection of carbon dioxide; and

14 (C) incorporates a comprehensive measure-  
15 ment, monitoring, and validation program.

16 (3) QUALIFICATIONS FOR AWARD.—To be eligi-  
17 ble for an award under this section, a project pro-  
18 posal must include the following:

19 (A) CAPACITY.—The capture of not less  
20 than eighty-five percent of the produced carbon  
21 dioxide at the facility, and not less than  
22 500,000 short tons of carbon dioxide per year.

23 (B) STORAGE AGREEMENT.—A binding  
24 agreement for the storage of all of the captured  
25 carbon dioxide in—

1 (i) a field testing validation activity  
2 under section 963 of the Energy Policy Act  
3 of 2005, as amended by this Act; or

4 (ii) other geological storage projects  
5 approved by the Secretary.

6 (C) PURITY LEVEL.—A purity level of at  
7 least 95 percent carbon dioxide by volume for  
8 the captured carbon dioxide delivered for stor-  
9 age.

10 (D) COMMITMENT TO CONTINUED OPER-  
11 ATION OF SUCCESSFUL UNIT.—If the project  
12 successfully demonstrates capture and storage  
13 of carbon dioxide, a commitment to continued  
14 capture and storage of carbon dioxide after the  
15 conclusion of the demonstration.

16 (4) COST-SHARING.—The cost-sharing require-  
17 ments of section 988 of the Energy Policy Act of  
18 2005 shall apply to this section.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There is  
20 authorized to be appropriated to the Secretary to carry  
21 out this section \$100,000,000 per year for fiscal years  
22 2009 through 2013.



1   **SEC. 305. CAPITOL POWER PLANT CARBON DIOXIDE EMIS-**  
2                   **SIONS DEMONSTRATION PROGRAM.**

3           The first section of the Act of March 4, 1911 (2  
4   U.S.C. 2162; 36 Stat. 1414, chapter 285), is amended in  
5   the seventh undesignated paragraph (relating to the Cap-  
6   itol power plant), under the heading “PUBLIC BUILD-  
7   INGS”, under the heading “UNDER THE DEPARTMENT OF  
8   THE INTERIOR”—

9           (1) by striking “ninety thousand dollars:” and  
10          inserting “\$90,000.”; and

11          (2) by striking “*Provided*, That hereafter the”  
12          and all that follows through the end of the proviso  
13          and inserting the following:

14          “(a) DESIGNATION.—The heating, lighting, and  
15   power plant constructed under the terms of the Act ap-  
16   proved April 28, 1904 (33 Stat. 479, chapter 1762), shall  
17   be known as the ‘Capitol power plant’, and all vacancies  
18   occurring in the force operating that plant and the sub-  
19   stations in connection with the plant shall be filled by the  
20   Architect of the Capitol, with the approval of the commis-  
21   sion in control of the House Office Building appointed  
22   under the first section of the Act of March 4, 1907 (2  
23   U.S.C. 2001).

24          “(b) CAPITOL POWER PLANT CARBON DIOXIDE  
25   EMISSIONS DEMONSTRATION PROGRAM.—

26               “(1) DEFINITIONS.—In this subsection:

1           “(A) ADMINISTRATOR.—The term ‘Admin-  
2           istrator’ means the Administrator of the Envi-  
3           ronmental Protection Agency.

4           “(B) CARBON DIOXIDE ENERGY EFFI-  
5           CIENCY.—The term ‘carbon dioxide energy effi-  
6           ciency’, with respect to a project, means the  
7           quantity of electricity used to power equipment  
8           for carbon dioxide capture and storage or use.

9           “(C) PROGRAM.—The term ‘program’  
10          means the competitive grant demonstration pro-  
11          gram established under paragraph (2)(B).

12          “(2) ESTABLISHMENT OF PROGRAM.—

13               “(A) FEASIBILITY STUDY.—Not later than  
14               180 days after the date of enactment of this  
15               section, the Architect of the Capitol, in coopera-  
16               tion with the Administrator, shall complete a  
17               feasibility study evaluating the available meth-  
18               ods to proceed with the project and program es-  
19               tablished under this section, taking into  
20               consideration—

21                       “(i) the availability of carbon capture  
22                       technologies;

23                       “(ii) energy conservation and carbon  
24                       reduction strategies; and

1                   “(iii) security of operations at the  
2 Capitol power plant.

3                   “(B) COMPETITIVE GRANT PROGRAM.—  
4 The Architect of the Capitol, in cooperation  
5 with the Administrator, shall establish a com-  
6 petitive grant demonstration program under  
7 which the Architect of the Capitol shall, subject  
8 to the availability of appropriations, provide to  
9 eligible entities, as determined by the Architect  
10 of the Capitol, in cooperation with the Adminis-  
11 trator, grants to carry out projects to dem-  
12 onstrate, during the 2-year period beginning on  
13 the date of enactment of this subsection, the  
14 capture and storage or use of carbon dioxide  
15 emitted from the Capitol power plant as a re-  
16 sult of burning coal.

17                   “(3) REQUIREMENTS.—

18                   “(A) PROVISION OF GRANTS.—

19                   “(i) IN GENERAL.—The Architect of  
20 the Capitol, in cooperation with the Ad-  
21 ministrator, shall provide the grants under  
22 the program on a competitive basis.

23                   “(ii) FACTORS FOR CONSIDER-  
24 ATION.—In providing grants under the  
25 program, the Architect of the Capitol, in

1 cooperation with the Administrator, shall  
2 take into consideration—

3 “(I) the practicability of conver-  
4 sion by the proposed project of carbon  
5 dioxide into useful products, such as  
6 transportation fuel;

7 “(II) the carbon dioxide energy  
8 efficiency of the proposed project; and

9 “(III) whether the proposed  
10 project is able to reduce more than 1  
11 air pollutant regulated under this Act.

12 “(B) REQUIREMENTS FOR ENTITIES.—An  
13 entity that receives a grant under the program  
14 shall—

15 “(i) use to carry out the project of the  
16 entity a technology designed to reduce or  
17 eliminate emission of carbon dioxide that is  
18 in existence on the date of enactment of  
19 this subsection that has been used—

20 “(I) by not less than 3 other fa-  
21 cilities (including a coal-fired power  
22 plant); and

23 “(II) on a scale of not less than  
24 5 times the size of the proposed

1 project of the entity at the Capitol  
2 power plant; and

3 “(ii) carry out the project of the enti-  
4 ty in consultation with, and with the con-  
5 currence of, the Architect of the Capitol  
6 and the Administrator.

7 “(C) CONSISTENCY WITH CAPITOL POWER  
8 PLANT MODIFICATIONS.—The Architect of the  
9 Capitol may require changes to a project under  
10 the program that are necessary to carry out any  
11 modifications to be made to the Capitol power  
12 plant.

13 “(4) INCENTIVE.—In addition to the grant  
14 under this subsection, the Architect of the Capitol  
15 may provide to an entity that receives such a grant  
16 an incentive award in an amount equal to not more  
17 than \$50,000, of which—

18 “(A) \$15,000 shall be provided after the  
19 project of the entity has sustained operation for  
20 a period of 100 days, as determined by the Ar-  
21 chitect of the Capitol;

22 “(B) \$15,000 shall be provided after the  
23 project of the entity has sustained operation for  
24 a period of 200 days, as determined by the Ar-  
25 chitect of the Capitol; and

1           “(C) \$20,000 shall be provided after the  
2           project of the entity has sustained operation for  
3           a period of 300 days, as determined by the Ar-  
4           chitect of the Capitol.

5           “(5) TERMINATION.—The program shall termi-  
6           nate on the date that is 2 years after the date of en-  
7           actment of this subsection.

8           “(6) AUTHORIZATION OF APPROPRIATIONS.—  
9           There is authorized to be appropriated to carry out  
10          the program \$3,000,000.”.

11 **SEC. 306. ASSESSMENT OF CARBON SEQUESTRATION AND**  
12 **METHANE AND NITROUS OXIDE EMISSIONS**  
13 **FROM TERRESTRIAL ECOSYSTEMS.**

14          (a) DEFINITIONS.—In this section:

15           (1) ADAPTATION STRATEGY.—The term “adap-  
16           tation strategy” means a land use and management  
17           strategy that can be used to increase the sequestra-  
18           tion capabilities of any terrestrial ecosystem.

19           (2) ASSESSMENT.—The term “assessment”  
20           means the national assessment authorized under  
21           subsection (b).

22           (3) COVERED GREENHOUSE GAS.—The term  
23           “covered greenhouse gas” means carbon dioxide, ni-  
24           trous oxide, and methane gas.

1           (4) NATIVE PLANT SPECIES.—The term “native  
2       plant species” means any noninvasive, naturally oc-  
3       curring plant species within a terrestrial ecosystem.

4           (5) SECRETARY.—The term “Secretary” means  
5       the Secretary of the Interior.

6           (6) FEDERAL LAND.—The term “Federal land”  
7       means—

8               (A) land of the National Forest System (as  
9       defined in section 11(a) of the Forest and  
10      Rangeland Renewable Resources Planning Act  
11      of 1974 (16 U.S.C. 1609(a))) administered by  
12      the Secretary of Agriculture, acting through the  
13      Chief of the Forest Service; and

14              (B) public lands (as defined in section 103  
15      of the Federal Land Policy and Management  
16      Act of 1976 (43 U.S.C. 1702)), the surface of  
17      which is administered by the Secretary of the  
18      Interior, acting through the Director of the Bu-  
19      reau of Land Management.

20          (7) TERRESTRIAL ECOSYSTEM.—

21              (A) IN GENERAL.—The term “terrestrial  
22      ecosystem” means any ecological and surficial  
23      geological system on Federal land.

24              (B) INCLUSIONS.—The term “terrestrial  
25      ecosystem” includes—

- 1 (i) forest land;
- 2 (ii) grassland; and
- 3 (iii) freshwater aquatic ecosystems.

4 (b) AUTHORIZATION OF ASSESSMENT.—Not later  
5 than 2 years after the date on which the final methodology  
6 is published under subsection (f)(3)(D), the Secretary  
7 shall complete a national assessment of—

8 (1) the quantity of carbon stored in and re-  
9 leased from terrestrial ecosystems; including from  
10 man-caused and natural fires; and

11 (2) the annual flux of covered greenhouse gases  
12 in and out of terrestrial ecosystems.

13 (c) COMPONENTS.—In conducting the assessment  
14 under subsection (b), the Secretary shall—

15 (1) determine the processes that control the  
16 flux of covered greenhouse gases in and out of each  
17 terrestrial ecosystem;

18 (2) estimate the technical and economic poten-  
19 tial for increasing carbon sequestration in natural  
20 and managed terrestrial ecosystems through man-  
21 agement activities or restoration activities in each  
22 terrestrial ecosystem;

23 (3) develop near-term and long-term adaptation  
24 strategies or mitigation strategies that can be  
25 employed—



1 (A) to enhance the sequestration of carbon  
2 in each terrestrial ecosystem;

3 (B) to reduce emissions of covered green-  
4 house gases; and

5 (C) to adapt to climate change; and

6 (4) estimate annual carbon sequestration capac-  
7 ity of terrestrial ecosystems under a range of policies  
8 in support of management activities to optimize se-  
9 questration.

10 (d) USE OF NATIVE PLANT SPECIES.—In developing  
11 restoration activities under subsection (c)(2) and manage-  
12 ment strategies and adaptation strategies under sub-  
13 section (c)(3), the Secretary shall emphasize the use of  
14 native plant species (including mixtures of many native  
15 plant species) for sequestering covered greenhouse gas in  
16 each terrestrial ecosystem.

17 (e) CONSULTATION.—In conducting the assessment  
18 under subsection (b) and developing the methodology  
19 under subsection (f), the Secretary shall consult with—

20 (1) the Secretary of Energy;

21 (2) the Secretary of Agriculture;

22 (3) the Administrator of the Environmental  
23 Protection Agency;

24 (4) the heads of other relevant agencies;

1           (5) consortia based at institutions of higher  
2 education and with research corporations; and

3           (6) Federal forest and grassland managers.

4           (f) METHODOLOGY.—

5           (1) IN GENERAL.—Not later than 1 year after  
6 the date of enactment of this Act, the Secretary  
7 shall develop a methodology for conducting the as-  
8 sessment.

9           (2) REQUIREMENTS.—The methodology devel-  
10 oped under paragraph (1)—

11           (A) shall—

12               (i) determine the method for meas-  
13 uring, monitoring, quantifying, and mone-  
14 tizing covered greenhouse gas emissions  
15 and reductions, including methods for allo-  
16 cating and managing offsets or credits;  
17 and

18               (ii) estimate the total capacity of each  
19 terrestrial ecosystem to—

20                   (I) sequester carbon; and

21                   (II) reduce emissions of covered  
22 greenhouse gases; and

23           (B) may employ economic and other sys-  
24 tems models, analyses, and estimations, to be

1 developed in consultation with each of the indi-  
2 viduals described in subsection (e).

3 (3) EXTERNAL REVIEW AND PUBLICATION.—

4 On completion of a proposed methodology, the Sec-  
5 retary shall—

6 (A) publish the proposed methodology;

7 (B) at least 60 days before the date on  
8 which the final methodology is published, solicit  
9 comments from—

10 (i) the public; and

11 (ii) heads of affected Federal and  
12 State agencies;

13 (C) establish a panel to review the pro-  
14 posed methodology published under subpara-  
15 graph (A) and any comments received under  
16 subparagraph (B), to be composed of  
17 members—

18 (i) with expertise in the matters de-  
19 scribed in subsections (c) and (d); and

20 (ii) that are, as appropriate, rep-  
21 resentatives of Federal agencies, institu-  
22 tions of higher education, nongovernmental  
23 organizations, State organizations, indus-  
24 try, and international organizations; and

1 (D) on completion of the review under sub-  
2 paragraph (C), publish in the Federal register  
3 the revised final methodology.

4 (g) ESTIMATE; REVIEW.—The Secretary shall—

5 (1) based on the assessment, prescribe the data,  
6 information, and analysis needed to establish a sci-  
7 entifically sound estimate of—

8 (A) the carbon sequestration capacity of  
9 relevant terrestrial ecosystems;

10 (B) a national inventory of covered green-  
11 house gas sources that is consistent with the in-  
12 ventory prepared by the Environmental Protec-  
13 tion Agency entitled the “Inventory of U.S.  
14 Greenhouse Gas Emissions and Sinks: 1990-  
15 2005”; and

16 (C) the willingness of covered greenhouse  
17 gas emitters to pay to sequester the covered  
18 greenhouse gases emitted by the applicable  
19 emitters in designated terrestrial ecosystems;  
20 and

21 (2) not later than 180 days after the date on  
22 which the assessment is completed, submit to the  
23 heads of applicable Federal agencies and the appro-  
24 priate committees of Congress a report that de-  
25 scribes the results of the assessment.

1 (h) DATA AND REPORT AVAILABILITY.—On comple-  
2 tion of the assessment, the Secretary shall incorporate the  
3 results of the assessment into a web-accessible database  
4 for public use.

5 **SEC. 307. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.**

6 (a) ESTABLISHMENT OF PROGRAM.—The Secretary  
7 of Commerce shall establish within the Office of Oceanic  
8 and Atmospheric Research of the National Oceanic and  
9 Atmospheric Administration, and shall carry out, a pro-  
10 gram of scientific research on abrupt climate change.

11 (b) PURPOSES OF PROGRAM.—The purposes of the  
12 program are as follows:

13 (1) To develop a global array of terrestrial and  
14 oceanographic indicators of paleoclimate in order to  
15 sufficiently identify and describe past instances of  
16 abrupt climate change.

17 (2) To improve understanding of thresholds and  
18 nonlinearities in geophysical systems related to the  
19 mechanisms of abrupt climate change.

20 (3) To incorporate such mechanisms into ad-  
21 vanced geophysical models of climate change.

22 (4) To test the output of such models against  
23 an improved global array of records of past abrupt  
24 climate changes.

1 (c) ABRUPT CLIMATE CHANGE DEFINED.—In this  
2 section, the term “abrupt climate change” means a change  
3 in the climate that occurs so rapidly or unexpectedly that  
4 human or natural systems have difficulty adapting to the  
5 climate as changed.

6 (d) AUTHORIZATION OF APPROPRIATIONS.—Of such  
7 sums previously authorized, there is authorized to be ap-  
8 propriated to the Department of Commerce for each of  
9 fiscal years 2009 through 2014, to remain available until  
10 expended, such sums as are necessary, not to exceed  
11 \$10,000,000, to carry out the research program required  
12 under this section.

13 **TITLE IV—COST-EFFECTIVE AND**  
14 **ENVIRONMENTALLY SUSTAIN-**  
15 **ABLE PUBLIC BUILDINGS**

16 **Subtitle A—Public Buildings Cost**  
17 **Reduction**

18 **SEC. 401. SHORT TITLE.**

19 This subtitle may be cited as the “Public Buildings  
20 Cost Reduction Act of 2007”.

21 **SEC. 402. COST-EFFECTIVE AND GEOTHERMAL HEAT PUMP**  
22 **TECHNOLOGY ACCELERATION PROGRAM.**

23 (a) DEFINITION OF ADMINISTRATOR.—In this sec-  
24 tion, the term “Administrator” means the Administrator  
25 of General Services.

1 (b) ESTABLISHMENT.—

2 (1) IN GENERAL.—The Administrator shall es-  
3 tablish a program to accelerate the use of more cost-  
4 effective technologies and practices and geothermal  
5 heat pumps at GSA facilities.

6 (2) REQUIREMENTS.—The program established  
7 under this subsection shall—

8 (A) ensure centralized responsibility for  
9 the coordination of cost reduction-related and  
10 geothermal heat pump-related recommenda-  
11 tions, practices, and activities of all relevant  
12 Federal agencies;

13 (B) provide technical assistance and oper-  
14 ational guidance to applicable tenants to  
15 achieve the goal identified in subsection  
16 (c)(2)(B)(ii); and

17 (C) establish methods to track the success  
18 of Federal departments and agencies with re-  
19 spect to that goal.

20 (c) ACCELERATED USE OF TECHNOLOGIES.—

21 (1) REVIEW.—

22 (A) IN GENERAL.—As part of the program  
23 under this section, not later than 90 days after  
24 the date of enactment of this Act, the Adminis-  
25 trator shall conduct a review of—

1 (i) current use of cost-effective light-  
2 ing technologies and geothermal heat  
3 pumps in GSA facilities; and

4 (ii) the availability to managers of  
5 GSA facilities of cost-effective lighting  
6 technologies and geothermal heat pumps.

7 (B) REQUIREMENTS.—The review under  
8 subparagraph (A) shall—

9 (i) examine the use of cost-effective  
10 lighting technologies, geothermal heat  
11 pumps, and other cost-effective tech-  
12 nologies and practices by Federal agencies  
13 in GSA facilities; and

14 (ii) as prepared in consultation with  
15 the Administrator of the Environmental  
16 Protection Agency, identify cost-effective  
17 lighting technology and geothermal heat  
18 pump technology standards that could be  
19 used for all types of GSA facilities.

20 (2) REPLACEMENT.—

21 (A) IN GENERAL.—As part of the program  
22 under this section, not later than 180 days  
23 after the date of enactment of this Act, the Ad-  
24 ministrator shall establish, using available ap-  
25 propriations, a cost-effective lighting technology



1 and geothermal heat pump technology accelera-  
2 tion program to achieve maximum feasible re-  
3 placement of existing lighting, heating, cooling  
4 technologies with cost-effective lighting tech-  
5 nologies and geothermal heat pump technologies  
6 in each GSA facility.

7 (B) ACCELERATION PLAN TIMETABLE.—

8 (i) IN GENERAL.—To implement the  
9 program established under subparagraph  
10 (A), not later than 1 year after the date of  
11 enactment of this Act, the Administrator  
12 shall establish a timetable, including mile-  
13 stones for specific activities needed to re-  
14 place existing lighting, heating, cooling  
15 technologies with cost-effective lighting  
16 technologies and geothermal heat pump  
17 technologies, to the maximum extent fea-  
18 sible (including at the maximum rate fea-  
19 sible), at each GSA facility.

20 (ii) GOAL.—The goal of the timetable  
21 under clause (i) shall be to complete, using  
22 available appropriations, maximum feasible  
23 replacement of existing lighting, heating,  
24 and cooling technologies with cost-effective  
25 lighting technologies and geothermal heat

1 pump technologies by not later than the  
2 date that is 5 years after the date of enact-  
3 ment of this Act.

4 (d) GSA FACILITY TECHNOLOGIES AND PRAC-  
5 TICES.—Not later than 180 days after the date of enact-  
6 ment of this Act, and annually thereafter, the Adminis-  
7 trator shall—

8 (1) ensure that a manager responsible for accel-  
9 erating the use of cost-effective technologies and  
10 practices and geothermal heat pump technologies is  
11 designated for each GSA facility; and

12 (2) submit to Congress a plan, to be imple-  
13 mented to the maximum extent feasible (including at  
14 the maximum rate feasible) using available appro-  
15 priations, by not later than the date that is 5 years  
16 after the date of enactment of this Act, that—

17 (A) with respect to cost-effective tech-  
18 nologies and practices—

19 (i) identifies the specific activities  
20 needed to achieve a 20-percent reduction in  
21 operational costs through the application  
22 of cost-effective technologies and practices  
23 from 2003 levels at GSA facilities by not  
24 later than 5 years after the date of enact-  
25 ment of this Act;

1 (ii) describes activities required and  
2 carried out to estimate the funds necessary  
3 to achieve the reduction described in clause  
4 (i);

5 (B) includes an estimate of the funds nec-  
6 essary to carry out this section;

7 (C) describes the status of the implementa-  
8 tion of cost-effective technologies and practices  
9 and geothermal heat pump technologies and  
10 practices at GSA facilities, including—

11 (i) the extent to which programs, in-  
12 cluding the program established under sub-  
13 section (b), are being carried out in ac-  
14 cordance with this subtitle; and

15 (ii) the status of funding requests and  
16 appropriations for those programs;

17 (D) identifies within the planning, budg-  
18 eting, and construction processes, all types of  
19 GSA facility-related procedures that inhibit new  
20 and existing GSA facilities from implementing  
21 cost-effective technologies or geothermal heat  
22 pump technologies;

23 (E) recommends language for uniform  
24 standards for use by Federal agencies in imple-  
25 menting cost-effective technologies and prac-

1           tices and geothermal heat pump technologies  
2           and practices;

3           (F) in coordination with the Office of Man-  
4           agement and Budget, reviews the budget proc-  
5           ess for capital programs with respect to alter-  
6           natives for—

7                   (i) permitting Federal agencies to re-  
8                   tain all identified savings accrued as a re-  
9                   sult of the use of cost-effective technologies  
10                  and geothermal heat pump technologies;  
11                  and

12                  (ii) identifying short- and long-term  
13                  cost savings that accrue from the use of  
14                  cost-effective technologies and practices  
15                  and geothermal heat pump technologies  
16                  and practices;

17           (G)(i) with respect to geothermal heat  
18           pump technologies, achieves substantial oper-  
19           ational cost savings through the application of  
20           the technologies; and

21                  (ii) with respect to cost-effective tech-  
22                  nologies and practices, achieves cost savings  
23                  through the application of cost-effective tech-  
24                  nologies and practices sufficient to pay the in-  
25                  cremental additional costs of installing the cost-

1 effective technologies and practices by not later  
2 than the date that is 5 years after the date of  
3 installation; and

4 (H) includes recommendations to address  
5 each of the matters, and a plan for implementa-  
6 tion of each recommendation, described in sub-  
7 paragraphs (A) through (G).

8 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
9 are authorized to be appropriated such sums as are nec-  
10 essary to carry out this section, to remain available until  
11 expended.

12 **SEC. 403. ENVIRONMENTAL PROTECTION AGENCY DEM-**  
13 **ONSTRATION GRANT PROGRAM FOR LOCAL**  
14 **GOVERNMENTS.**

15 (a) GRANT PROGRAM.—

16 (1) IN GENERAL.—The Administrator of the  
17 Environmental Protection Agency (referred to in  
18 this section as the “Administrator”) shall establish  
19 a demonstration program under which the Adminis-  
20 trator shall provide competitive grants to assist local  
21 governments (such as municipalities and counties),  
22 with respect to local government buildings—

23 (A) to deploy cost-effective technologies  
24 and practices; and

1 (B) to achieve operational cost savings,  
2 through the application of cost-effective tech-  
3 nologies and practices, as verified by the Ad-  
4 ministrator.

5 (2) COST SHARING.—

6 (A) IN GENERAL.—The Federal share of  
7 the cost of an activity carried out using a grant  
8 provided under this section shall be 40 percent.

9 (B) WAIVER OF NON-FEDERAL SHARE.—  
10 The Administrator may waive up to 100 per-  
11 cent of the local share of the cost of any grant  
12 under this section should the Administrator de-  
13 termine that the community is economically dis-  
14 tressed, pursuant to objective economic criteria  
15 established by the Administrator in published  
16 guidelines.

17 (3) MAXIMUM AMOUNT.—The amount of a  
18 grant provided under this subsection shall not exceed  
19 \$1,000,000.

20 (b) GUIDELINES.—

21 (1) IN GENERAL.—Not later than 1 year after  
22 the date of enactment of this Act, the Administrator  
23 shall issue guidelines to implement the grant pro-  
24 gram established under subsection (a).

1           (2) REQUIREMENTS.—The guidelines under  
2 paragraph (1) shall establish—

3           (A) standards for monitoring and  
4 verification of operational cost savings through  
5 the application of cost-effective technologies and  
6 practices reported by grantees under this sec-  
7 tion;

8           (B) standards for grantees to implement  
9 training programs, and to provide technical as-  
10 sistance and education, relating to the retrofit  
11 of buildings using cost-effective technologies  
12 and practices; and

13           (C) a requirement that each local govern-  
14 ment that receives a grant under this section  
15 shall achieve facility-wide cost savings, through  
16 renovation of existing local government build-  
17 ings using cost-effective technologies and prac-  
18 tices, of at least 40 percent as compared to the  
19 baseline operational costs of the buildings be-  
20 fore the renovation (as calculated assuming a 3-  
21 year, weather-normalized average).

22       (c) COMPLIANCE WITH STATE AND LOCAL LAW.—  
23 Nothing in this section or any program carried out using  
24 a grant provided under this section supersedes or other-  
25 wise affects any State or local law, to the extent that the

1 State or local law contains a requirement that is more  
2 stringent than the relevant requirement of this section.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
4 authorized to be appropriated to carry out this section  
5 \$20,000,000 for each of fiscal years 2007 through 2012.

6 (e) REPORTS.—

7 (1) IN GENERAL.—The Administrator shall pro-  
8 vide annual reports to Congress on cost savings  
9 achieved and actions taken and recommendations  
10 made under this section, and any recommendations  
11 for further action.

12 (2) FINAL REPORT.—The Administrator shall  
13 issue a final report at the conclusion of the program,  
14 including findings, a summary of total cost savings  
15 achieved, and recommendations for further action.

16 (f) TERMINATION.—The program under this section  
17 shall terminate on September 30, 2012.

18 **SEC. 404. DEFINITIONS.**

19 In this subtitle:

20 (1) COST-EFFECTIVE LIGHTING TECH-  
21 NOLOGY.—

22 (A) IN GENERAL.—The term “cost-effec-  
23 tive lighting technology” means a lighting tech-  
24 nology that—



1 (i) will result in substantial oper-  
2 ational cost savings by ensuring an in-  
3 stalled consumption of not more than 1  
4 watt per square foot; or

5 (ii) is contained in a list under—

6 (I) section 553 of Public Law  
7 95–619 (42 U.S.C. 8259b); and

8 (II) Federal acquisition regula-  
9 tion 23–203.

10 (B) INCLUSIONS.—The term “cost-effec-  
11 tive lighting technology” includes—

12 (i) lamps;

13 (ii) ballasts;

14 (iii) luminaires;

15 (iv) lighting controls;

16 (v) daylighting; and

17 (vi) early use of other highly cost-ef-  
18 fective lighting technologies.

19 (2) COST-EFFECTIVE TECHNOLOGIES AND  
20 PRACTICES.—The term “cost-effective technologies  
21 and practices” means a technology or practice  
22 that—

23 (A) will result in substantial operational  
24 cost savings by reducing utility costs; and

1 (B) complies with the provisions of section  
2 553 of Public Law 95–619 (42 U.S.C. 8259b)  
3 and Federal acquisition regulation 23–203.

4 (3) OPERATIONAL COST SAVINGS.—

5 (A) IN GENERAL.—The term “operational  
6 cost savings” means a reduction in end-use  
7 operational costs through the application of  
8 cost-effective technologies and practices or geo-  
9 thermal heat pumps, including a reduction in  
10 electricity consumption relative to consumption  
11 by the same customer or at the same facility in  
12 a given year, as defined in guidelines promul-  
13 gated by the Administrator pursuant to section  
14 403(b), that achieves cost savings sufficient to  
15 pay the incremental additional costs of using  
16 cost-effective technologies and practices or geo-  
17 thermal heat pumps by not later than—

18 (i) for cost-effective technologies and  
19 practices, the date that is 5 years after the  
20 date of installation; and

21 (ii) for geothermal heat pumps, as  
22 soon as practical after the date of installa-  
23 tion of the applicable geothermal heat  
24 pump.

1 (B) INCLUSIONS.—The term “operational  
2 cost savings” includes savings achieved at a fa-  
3 cility as a result of—

4 (i) the installation or use of cost-effec-  
5 tive technologies and practices; or

6 (ii) the planting of vegetation that  
7 shades the facility and reduces the heating,  
8 cooling, or lighting needs of the facility.

9 (C) EXCLUSION.—The term “operational  
10 cost savings” does not include savings from  
11 measures that would likely be adopted in the  
12 absence of cost-effective technology and prac-  
13 tices programs, as determined by the Adminis-  
14 trator.

15 (4) GEOTHERMAL HEAT PUMP.—The term  
16 “geothermal heat pump” means any heating or air  
17 conditioning technology that—

18 (A) uses the ground or ground water as a  
19 thermal energy source to heat, or as a thermal  
20 energy sink to cool, a building; and

21 (B) meets the requirements of the Energy  
22 Star program of the Environmental Protection  
23 Agency applicable to geothermal heat pumps on  
24 the date of purchase of the technology.

25 (5) GSA FACILITY.—

1 (A) IN GENERAL.—The term “GSA facil-  
2 ity” means any building, structure, or facility,  
3 in whole or in part (including the associated  
4 support systems of the building, structure, or  
5 facility) that—

6 (i) is constructed (including facilities  
7 constructed for lease), renovated, or pur-  
8 chased, in whole or in part, by the Admin-  
9 istrator for use by the Federal Govern-  
10 ment; or

11 (ii) is leased, in whole or in part, by  
12 the Administrator for use by the Federal  
13 Government—

14 (I) except as provided in sub-  
15 clause (II), for a term of not less than  
16 5 years; or

17 (II) for a term of less than 5  
18 years, if the Administrator determines  
19 that use of cost-effective technologies  
20 and practices would result in the pay-  
21 back of expenses.

22 (B) INCLUSION.—The term “GSA facility”  
23 includes any group of buildings, structures, or  
24 facilities described in subparagraph (A) (includ-  
25 ing the associated energy-consuming support

1 systems of the buildings, structures, and facili-  
2 ties).

3 (C) EXEMPTION.—The Administrator may  
4 exempt from the definition of “GSA facility”  
5 under this paragraph a building, structure, or  
6 facility that meets the requirements of section  
7 543(c) of Public Law 95–619 (42 U.S.C.  
8 8253(c)).

9 **Subtitle B—Installation of Photo-**  
10 **voltaic System at Department of**  
11 **Energy Headquarters Building**

12 **SEC. 411. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT**  
13 **DEPARTMENT OF ENERGY HEADQUARTERS**  
14 **BUILDING.**

15 (a) IN GENERAL.—The Administrator of General  
16 Services shall install a photovoltaic system, as set forth  
17 in the Sun Wall Design Project, for the headquarters  
18 building of the Department of Energy located at 1000  
19 Independence Avenue, Southwest, Washington, D.C., com-  
20 monly known as the Forrestal Building.

21 (b) FUNDING.—There shall be available from the  
22 Federal Buildings Fund established by section 592 of title  
23 40, United States Code, \$30,000,000 to carry out this sec-  
24 tion. Such sums shall be derived from the unobligated bal-  
25 ance of amounts made available from the Fund for fiscal

1 year 2007, and prior fiscal years, for repairs and alter-  
2 ations and other activities (excluding amounts made avail-  
3 able for the energy program). Such sums shall remain  
4 available until expended.

5 (c) OBLIGATION OF FUNDS.—None of the funds  
6 made available pursuant to subsection (b) may be obli-  
7 gated prior to September 30, 2007.

8 **Subtitle C—High-Performance**  
9 **Green Buildings**

10 **SEC. 421. SHORT TITLE.**

11 This subtitle may be cited as the “High-Performance  
12 Green Buildings Act of 2007”.

13 **SEC. 422. FINDINGS AND PURPOSES.**

14 (a) FINDINGS.—Congress finds that—

15 (1) high-performance green buildings—

16 (A) reduce energy, water, and material re-  
17 source use and the generation of waste;

18 (B) improve indoor environmental quality,  
19 and protect indoor air quality by, for example,  
20 using materials that emit fewer or no toxic  
21 chemicals into the indoor air;

22 (C) improve thermal comfort;

23 (D) improve lighting and the acoustic envi-  
24 ronment;

1 (E) improve the health and productivity of  
2 individuals who live and work in the buildings;

3 (F) improve indoor and outdoor impacts of  
4 the buildings on human health and the environ-  
5 ment;

6 (G) increase the use of environmentally  
7 preferable products, including biobased, recy-  
8 cled, and nontoxic products with lower lifecycle  
9 impacts; and

10 (H) increase opportunities for reuse of ma-  
11 terials and for recycling;

12 (2) during the planning, design, and construc-  
13 tion of a high-performance green building, the envi-  
14 ronmental and energy impacts of building location  
15 and site design, the minimization of energy and ma-  
16 terials use, and the environmental impacts of the  
17 building are considered;

18 (3) according to the United States Green Build-  
19 ing Council, certified green buildings, as compared  
20 to conventional buildings—

21 (A) use an average of 36 percent less total  
22 energy (and in some cases up to 50 to 70 per-  
23 cent less total energy);

24 (B) use 30 percent less water; and

1 (C) reduce waste costs, often by 50 to 90  
2 percent;

3 (4) the benefits of high-performance green  
4 buildings are important, because in the United  
5 States, buildings are responsible for approximately—

6 (A) 39 percent of primary energy use;

7 (B) 12 percent of potable water use;

8 (C) 136,000,000 tons of building-related  
9 construction and demolition debris;

10 (D) 70 percent of United States resource  
11 consumption; and

12 (E) 70 percent of electricity consumption;

13 (5) green building certification programs can be  
14 highly beneficial by disseminating up-to-date infor-  
15 mation and expertise regarding high-performance  
16 green buildings, and by providing third-party  
17 verification of green building design, practices, and  
18 materials, and other aspects of buildings; and

19 (6) a July 2006 study completed for the Gen-  
20 eral Services Administration, entitled “Sustainable  
21 Building Rating Systems Summary,” concluded  
22 that—

23 (A) green building standards are an impor-  
24 tant means to encourage better practices;



1 (B) the Leadership in Energy and Envi-  
2 ronmental Design (LEED) standard for green  
3 building certification is “currently the dominant  
4 system in the United States market and is  
5 being adapted to multiple markets worldwide”;  
6 and

7 (C) there are other useful green building  
8 certification or rating programs in various  
9 stages of development and adoption, including  
10 the Green Globes program and other rating sys-  
11 tems.

12 (b) PURPOSES.—The purposes of this subtitle are—

13 (1) to encourage the Federal Government to act  
14 as an example for State and local governments, the  
15 private sector, and individuals by building high-per-  
16 formance green buildings that reduce energy use and  
17 environmental impacts;

18 (2) to establish an Office within the General  
19 Services Administration, and a Green Building Advi-  
20 sory Committee, to advance the goals of conducting  
21 research and development and public outreach, and  
22 to move the Federal Government toward construc-  
23 tion of high-performance green buildings;

24 (3) to encourage States, local governments, and  
25 school systems to site, build, renovate, and operate

1 high-performance green schools through the adop-  
2 tion of voluntary guidelines for those schools, the  
3 dissemination of grants, and the adoption of envi-  
4 ronmental health plans and programs;

5 (4) to strengthen Federal leadership on high-  
6 performance green buildings through the adoption of  
7 incentives for high-performance green buildings, and  
8 improved green procurement by Federal agencies;  
9 and

10 (5) to demonstrate that high-performance green  
11 buildings can and do provide significant benefits, in  
12 order to encourage wider adoption of green building  
13 practices, through the adoption of demonstration  
14 projects.

15 **SEC. 423. DEFINITIONS.**

16 In this subtitle:

17 (1) ADMINISTRATOR.—The term “Adminis-  
18 trator” means the Administrator of General Serv-  
19 ices.

20 (2) COMMITTEE.—The term “Committee”  
21 means the Green Building Advisory Committee es-  
22 tablished under section 433(a).

23 (3) DIRECTOR.—The term “Director” means  
24 the individual appointed to the position established  
25 under section 431(a).

1 (4) FEDERAL FACILITY.—

2 (A) IN GENERAL.—The term “Federal fa-  
3 cility” means any building or facility the in-  
4 tended use of which requires the building or fa-  
5 cility to be—

6 (i) accessible to the public; and

7 (ii) constructed or altered by or on be-  
8 half of the United States.

9 (B) EXCLUSIONS.—The term “Federal fa-  
10 cility” does not include a privately-owned resi-  
11 dential or commercial structure that is not  
12 leased by the Federal Government.

13 (5) HIGH-PERFORMANCE GREEN BUILDING.—  
14 The term “high-performance green building” means  
15 a building—

16 (A) that, during its life-cycle—

17 (i) reduces energy, water, and mate-  
18 rial resource use and the generation of  
19 waste;

20 (ii) improves indoor environmental  
21 quality, including protecting indoor air  
22 quality during construction, using low-  
23 emitting materials, improving thermal  
24 comfort, and improving lighting and acous-

1                   tie environments that affect occupant  
2                   health and productivity;

3                   (iii) improves indoor and outdoor im-  
4                   pacts of the building on human health and  
5                   the environment;

6                   (iv) increases the use of environ-  
7                   mentally preferable products, including  
8                   biobased, recycled content, and nontoxic  
9                   products with lower life-cycle impacts;

10                  (v) increases reuse and recycling op-  
11                  portunities; and

12                  (vi) integrates systems in the building;  
13                  and

14                  (B) for which, during its planning, design,  
15                  and construction, the environmental and energy  
16                  impacts of building location and site design are  
17                  considered.

18                  (6) LIFE CYCLE.—The term “life cycle”, with  
19                  respect to a high-performance green building, means  
20                  all stages of the useful life of the building (including  
21                  components, equipment, systems, and controls of the  
22                  building) beginning at conception of a green building  
23                  project and continuing through site selection, design,  
24                  construction, landscaping, commissioning, operation,

1 maintenance, renovation, deconstruction or demoli-  
2 tion, removal, and recycling of the green building.

3 (7) LIFE-CYCLE ASSESSMENT.—The term “life-  
4 cycle assessment” means a comprehensive system  
5 approach for measuring the environmental perform-  
6 ance of a product or service over the life of the prod-  
7 uct or service, beginning at raw materials acquisition  
8 and continuing through manufacturing, transpor-  
9 tation, installation, use, reuse, and end-of-life waste  
10 management.

11 (8) LIFE-CYCLE COSTING.—The term “life-cycle  
12 costing”, with respect to a high-performance green  
13 building, means a technique of economic evaluation  
14 that—

15 (A) sums, over a given study period, the  
16 costs of initial investment (less resale value), re-  
17 placements, operations (including energy use),  
18 and maintenance and repair of an investment  
19 decision; and

20 (B) is expressed—

21 (i) in present value terms, in the case  
22 of a study period equivalent to the longest  
23 useful life of the building, determined by  
24 taking into consideration the typical life of

1                   such a building in the area in which the  
2                   building is to be located; or

3                   (ii) in annual value terms, in the case  
4                   of any other study period.

5                   (9) OFFICE.—The term “Office” means the Of-  
6                   fice of High-Performance Green Buildings estab-  
7                   lished under section 432(a).

8   **PART I—OFFICE OF HIGH-PERFORMANCE GREEN**  
9                   **BUILDINGS**

10 **SEC. 431. OVERSIGHT.**

11           (a) IN GENERAL.—The Administrator shall establish  
12 within the General Services Administration, and appoint  
13 an individual to serve as Director in, a position in the ca-  
14 reer-reserved Senior Executive service, to—

15                   (1) establish and manage the Office in accord-  
16                   ance with section 432; and

17                   (2) carry out other duties as required under  
18                   this subtitle.

19           (b) COMPENSATION.—The compensation of the Di-  
20 rector shall not exceed the maximum rate of basic pay for  
21 the Senior Executive Service under section 5382 of title  
22 5, United States Code, including any applicable locality-  
23 based comparability payment that may be authorized  
24 under section 5304(h)(2)(C) of that title.

1 **SEC. 432. OFFICE OF HIGH-PERFORMANCE GREEN BUILD-**  
2 **INGS.**

3 (a) ESTABLISHMENT.—The Director shall establish  
4 within the General Services Administration an Office of  
5 High-Performance Green Buildings.

6 (b) DUTIES.—The Director shall—

7 (1) ensure full coordination of high-performance  
8 green building information and activities within the  
9 General Services Administration and all relevant  
10 Federal agencies, including, at a minimum—

11 (A) the Environmental Protection Agency;

12 (B) the Office of the Federal Environ-  
13 mental Executive;

14 (C) the Office of Federal Procurement Pol-  
15 icy;

16 (D) the Department of Energy;

17 (E) the Department of Health and Human  
18 Services;

19 (F) the Department of Defense; and

20 (G) such other Federal agencies as the Di-  
21 rector considers to be appropriate;

22 (2) establish a senior-level green building advi-  
23 sory committee, which shall provide advice and rec-  
24 ommendations in accordance with section 433;

1           (3) identify and biennially reassess improved or  
2           higher rating standards recommended by the Com-  
3           mittee;

4           (4) establish a national high-performance green  
5           building clearinghouse in accordance with section  
6           434, which shall provide green building information  
7           through—

8                   (A) outreach;

9                   (B) education; and

10                  (C) the provision of technical assistance;

11           (5) ensure full coordination of research and de-  
12           velopment information relating to high-performance  
13           green building initiatives under section 435;

14           (6) identify and develop green building stand-  
15           ards that could be used for all types of Federal fa-  
16           cilities in accordance with section 435;

17           (7) establish green practices that can be used  
18           throughout the life of a Federal facility;

19           (8) review and analyze current Federal budget  
20           practices and life-cycle costing issues, and make rec-  
21           ommendations to Congress, in accordance with sec-  
22           tion 436; and

23           (9) complete and submit the report described in  
24           subsection (c).



1       (c) REPORT.—Not later than 2 years after the date  
2 of enactment of this Act, and biennially thereafter, the Di-  
3 rector shall submit to Congress a report that—

4           (1) describes the status of the green building  
5 initiatives under this subtitle and other Federal pro-  
6 grams in effect as of the date of the report,  
7 including—

8           (A) the extent to which the programs are  
9 being carried out in accordance with this sub-  
10 title; and

11           (B) the status of funding requests and ap-  
12 propriations for those programs;

13           (2) identifies within the planning, budgeting,  
14 and construction process all types of Federal facility  
15 procedures that inhibit new and existing Federal fa-  
16 cilities from becoming high-performance green build-  
17 ings, as measured by the standard for high-perform-  
18 ance green buildings identified in accordance with  
19 subsection (d);

20           (3) identifies inconsistencies, as reported to the  
21 Committee, in Federal law with respect to product  
22 acquisition guidelines and high-performance product  
23 guidelines;

1           (4) recommends language for uniform stand-  
2           ards for use by Federal agencies in environmentally  
3           responsible acquisition;

4           (5) in coordination with the Office of Manage-  
5           ment and Budget, reviews the budget process for  
6           capital programs with respect to alternatives for—

7                 (A) restructuring of budgets to require the  
8                 use of complete energy- and environmental-cost  
9                 accounting;

10                (B) using operations expenditures in budg-  
11                et-related decisions while simultaneously incor-  
12                porating productivity and health measures (as  
13                those measures can be quantified by the Office,  
14                with the assistance of universities and national  
15                laboratories);

16                (C) permitting Federal agencies to retain  
17                all identified savings accrued as a result of the  
18                use of life cycle costing; and

19                (D) identifying short- and long-term cost  
20                savings that accrue from high-performance  
21                green buildings, including those relating to  
22                health and productivity;

23           (6) identifies green, self-sustaining technologies  
24           to address the operational needs of Federal facilities

1 in times of national security emergencies, natural  
2 disasters, or other dire emergencies;

3 (7) summarizes and highlights development, at  
4 the State and local level, of green building initia-  
5 tives, including Executive orders, policies, or laws  
6 adopted promoting green building (including the sta-  
7 tus of implementation of those initiatives); and

8 (8) includes, for the 2-year period covered by  
9 the report, recommendations to address each of the  
10 matters, and a plan for implementation of each rec-  
11 ommendation, described in paragraphs (1) through  
12 (6).

13 (d) IDENTIFICATION OF STANDARD.—

14 (1) IN GENERAL.—For the purpose of sub-  
15 section (c)(2), not later than 60 days after the date  
16 of enactment of this Act, the Director shall identify  
17 a standard that the Director determines to be the  
18 most likely to encourage a comprehensive and envi-  
19 ronmentally-sound approach to certification of green  
20 buildings.

21 (2) BASIS.—The standard identified under  
22 paragraph (1) shall be based on—

23 (A) a biennial study, which shall be carried  
24 out by the Director to compare and evaluate  
25 standards;

1 (B) the ability and availability of assessors  
2 and auditors to independently verify the criteria  
3 and measurement of metrics at the scale nec-  
4 essary to implement this subtitle;

5 (C) the ability of the applicable standard-  
6 setting organization to collect and reflect public  
7 comment;

8 (D) the ability of the standard to be devel-  
9 oped and revised through a consensus-based  
10 process;

11 (E) an evaluation of the adequacy of the  
12 standard, which shall give credit for—

13 (i) efficient and sustainable use of  
14 water, energy, and other natural resources;

15 (ii) use of renewable energy sources;

16 (iii) improved indoor environmental  
17 quality through enhanced indoor air qual-  
18 ity, thermal comfort, acoustics, day light-  
19 ing, pollutant source control, and use of  
20 low-emission materials and building system  
21 controls; and

22 (iv) such other criteria as the Director  
23 determines to be appropriate; and

24 (F) national recognition within the build-  
25 ing industry.

1 (3) BIENNIAL REVIEW.—The Director shall—

2 (A) conduct a biennial review of the stand-  
3 ard identified under paragraph (1); and

4 (B) include the results of each biennial re-  
5 view in the report required to be submitted  
6 under subsection (c).

7 (e) IMPLEMENTATION.—The Office shall carry out  
8 each plan for implementation of recommendations under  
9 subsection (c)(7).

10 **SEC. 433. GREEN BUILDING ADVISORY COMMITTEE.**

11 (a) ESTABLISHMENT.—Not later than 180 days after  
12 the date of enactment of this Act, the Director shall estab-  
13 lish an advisory committee, to be known as the “Green  
14 Building Advisory Committee”.

15 (b) MEMBERSHIP.—

16 (1) IN GENERAL.—The Committee shall be  
17 composed of representatives of, at a minimum—

18 (A) each agency referred to in section  
19 432(b)(1); and

20 (B) other relevant agencies and entities, as  
21 determined by the Director, including at least 1  
22 representative of each of—

23 (i) State and local governmental green  
24 building programs;

1 (ii) independent green building asso-  
2 ciations or councils;

3 (iii) building experts, including archi-  
4 tects, material suppliers, and construction  
5 contractors;

6 (iv) security advisors focusing on na-  
7 tional security needs, natural disasters,  
8 and other dire emergency situations; and

9 (v) environmental health experts, in-  
10 cluding those with experience in children's  
11 health.

12 (2) NON-FEDERAL MEMBERS.—The total num-  
13 ber of non-Federal members on the Committee at  
14 any time shall not exceed 15.

15 (c) MEETINGS.—The Director shall establish a reg-  
16 ular schedule of meetings for the Committee.

17 (d) DUTIES.—The Committee shall provide advice  
18 and expertise for use by the Director in carrying out the  
19 duties under this subtitle, including such recommenda-  
20 tions relating to Federal activities carried out under sec-  
21 tions 434 through 436 as are agreed to by a majority of  
22 the members of the Committee.

23 (e) FACA EXEMPTION.—The Committee shall not be  
24 subject to section 14 of the Federal Advisory Committee  
25 Act (5 U.S.C. App.).

1 **SEC. 434. PUBLIC OUTREACH.**

2 The Director, in coordination with the Committee,  
3 shall carry out public outreach to inform individuals and  
4 entities of the information and services available Govern-  
5 ment-wide by—

6 (1) establishing and maintaining a national  
7 high-performance green building clearinghouse, in-  
8 cluding on the Internet, that—

9 (A) identifies existing similar efforts and  
10 coordinates activities of common interest; and

11 (B) provides information relating to high-  
12 performance green buildings, including  
13 hyperlinks to Internet sites that describe related  
14 activities, information, and resources of—

15 (i) the Federal Government;

16 (ii) State and local governments;

17 (iii) the private sector (including non-  
18 governmental and nonprofit entities and  
19 organizations); and

20 (iv) other relevant organizations, in-  
21 cluding those from other countries;

22 (2) identifying and recommending educational  
23 resources for implementing high-performance green  
24 building practices, including security and emergency  
25 benefits and practices;

1           (3) providing access to technical assistance on  
2           using tools and resources to make more cost-effec-  
3           tive, energy-efficient, health-protective, and environ-  
4           mentally beneficial decisions for constructing high-  
5           performance green buildings, including tools avail-  
6           able to conduct life-cycle costing and life-cycle as-  
7           sessment;

8           (4) providing information on application proc-  
9           esses for certifying a high-performance green build-  
10          ing, including certification and commissioning;

11          (5) providing technical information, market re-  
12          search, or other forms of assistance or advice that  
13          would be useful in planning and constructing high-  
14          performance green buildings; and

15          (6) using such other methods as are determined  
16          by the Director to be appropriate.

17 **SEC. 435. RESEARCH AND DEVELOPMENT.**

18          (a) ESTABLISHMENT.—The Director, in coordination  
19          with the Committee, shall—

20               (1)(A) survey existing research and studies re-  
21               lating to high-performance green buildings; and

22               (B) coordinate activities of common interest;

23               (2) develop and recommend a high-performance  
24               green building research plan that—



1 (A) identifies information and research  
2 needs, including the relationships between  
3 human health, occupant productivity, and each  
4 of—

5 (i) emissions from materials and prod-  
6 ucts in the building;

7 (ii) natural day lighting;

8 (iii) ventilation choices and tech-  
9 nologies;

10 (iv) heating, cooling, and system con-  
11 trol choices and technologies;

12 (v) moisture control and mold;

13 (vi) maintenance, cleaning, and pest  
14 control activities;

15 (vii) acoustics; and

16 (viii) other issues relating to the  
17 health, comfort, productivity, and perform-  
18 ance of occupants of the building; and

19 (B) promotes the development and dissemi-  
20 nation of high-performance green building  
21 measurement tools that, at a minimum, may be  
22 used—

23 (i) to monitor and assess the life-cycle  
24 performance of facilities (including dem-

1                   onstration projects) built as high-perform-  
2                   ance green buildings; and

3                   (ii) to perform life-cycle assessments;

4                   (3) assist the budget and life-cycle costing func-  
5                   tions of the Office under section 436;

6                   (4) study and identify potential benefits of  
7                   green buildings relating to security, natural disaster,  
8                   and emergency needs of the Federal Government;  
9                   and

10                  (5) support other research initiatives deter-  
11                  mined by the Office.

12                  (b) INDOOR AIR QUALITY.—The Director, in con-  
13                  sultation with the Committee, shall develop and carry out  
14                  a comprehensive indoor air quality program for all Federal  
15                  facilities to ensure the safety of Federal workers and facil-  
16                  ity occupants—

17                   (1) during new construction and renovation of  
18                   facilities; and

19                   (2) in existing facilities.

20                  **SEC. 436. BUDGET AND LIFE-CYCLE COSTING AND CON-**  
21                  **TRACTING.**

22                  (a) ESTABLISHMENT.—The Director, in coordination  
23                  with the Committee, shall—

24                   (1) identify, review, and analyze current budget  
25                   and contracting practices that affect achievement of

1 high-performance green buildings, including the  
2 identification of barriers to green building life-cycle  
3 costing and budgetary issues;

4 (2) develop guidance and conduct training ses-  
5 sions with budget specialists and contracting per-  
6 sonnel from Federal agencies and budget examiners  
7 to apply life-cycle cost criteria to actual projects;

8 (3) identify tools to aid life-cycle cost decision-  
9 making; and

10 (4) explore the feasibility of incorporating the  
11 benefits of green buildings, such as security benefits,  
12 into a cost-budget analysis to aid in life-cycle costing  
13 for budget and decision making processes.

14 **SEC. 437. AUTHORIZATION OF APPROPRIATIONS.**

15 There is authorized to be appropriated to carry out  
16 this part \$4,000,000 for each of fiscal years 2008 through  
17 2012, to remain available until expended.

18 **PART II—HEALTHY HIGH-PERFORMANCE**

19 **SCHOOLS**

20 **SEC. 441. DEFINITION OF HIGH-PERFORMANCE SCHOOL.**

21 In this part, the term “high-performance school” has  
22 the meaning given the term “healthy, high-performance  
23 school building” in section 5586 of the Elementary and  
24 Secondary Education Act of 1965 (20 U.S.C. 7277e).

1 **SEC. 442. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.**

2 The Administrator of the Environmental Protection  
3 Agency, in consultation with the Secretary of Education,  
4 may provide grants to qualified State agencies for use in—

5 (1) providing technical assistance for programs  
6 of the Environmental Protection Agency (including  
7 the Tools for Schools Program and the Healthy  
8 School Environmental Assessment Tool) to schools  
9 for use in addressing environmental issues; and

10 (2) development of State school environmental  
11 quality plans that include—

12 (A) standards for school building design,  
13 construction, and renovation; and

14 (B) identification of ongoing school build-  
15 ing environmental problems in the State and  
16 recommended solutions to address those prob-  
17 lems, including assessment of information on  
18 the exposure of children to environmental haz-  
19 ards in school facilities.

20 **SEC. 443. MODEL GUIDELINES FOR SITING OF SCHOOL FA-**  
21 **CILITIES.**

22 The Administrator of the Environmental Protection  
23 Agency, in consultation with the Secretary of Education  
24 and the Secretary of Health and Human Services, shall  
25 develop voluntary school site selection guidelines that ac-  
26 count for—

1           (1) the special vulnerability of children to haz-  
2           ardous substances or pollution exposures in any case  
3           in which the potential for contamination at a poten-  
4           tial school site exists;

5           (2) modes of transportation available to stu-  
6           dents and staff;

7           (3) the efficient use of energy; and

8           (4) the potential use of a school at the site as  
9           an emergency shelter.

10 **SEC. 444. PUBLIC OUTREACH.**

11       (a) IN GENERAL.—The Administrator of the Envi-  
12       ronmental Protection Agency shall provide to the Director  
13       information relating to all activities carried out under this  
14       part, which the Director shall include in the report de-  
15       scribed in section 432(c).

16       (b) PUBLIC OUTREACH.—The Director shall ensure,  
17       to the maximum extent practicable, that the public clear-  
18       inghouse established under section 434 receives and makes  
19       available information on the exposure of children to envi-  
20       ronmental hazards in school facilities, as provided by the  
21       Administrator of the Environmental Protection Agency.

22 **SEC. 445. ENVIRONMENTAL HEALTH PROGRAM.**

23       (a) IN GENERAL.—The Administrator of the Envi-  
24       ronmental Protection Agency, in consultation with the  
25       Secretary of Education, the Secretary of Health and

1 Human Services, and other relevant agencies, shall issue  
2 voluntary guidelines for use by the State in developing and  
3 implementing an environmental health program for  
4 schools that—

5 (1) takes into account the status and findings  
6 of Federal research initiatives established under this  
7 subtitle and other relevant Federal law with respect  
8 to school facilities, including relevant updates on  
9 trends in the field, such as the impact of school fa-  
10 cility environments on student and staff—

11 (A) health, safety, and productivity; and

12 (B) disabilities or special needs;

13 (2) provides research using relevant tools iden-  
14 tified or developed in accordance with section 435(a)  
15 to quantify the relationships between—

16 (A) human health, occupant productivity,  
17 and student performance; and

18 (B) with respect to school facilities, each  
19 of—

20 (i) pollutant emissions from materials  
21 and products;

22 (ii) natural day lighting;

23 (iii) ventilation choices and tech-  
24 nologies;

1 (iv) heating and cooling choices and  
2 technologies;

3 (v) moisture control and mold;

4 (vi) maintenance, cleaning, and pest  
5 control activities;

6 (vii) acoustics; and

7 (viii) other issues relating to the  
8 health, comfort, productivity, and perform-  
9 ance of occupants of the school facilities;

10 (3) provides technical assistance on siting, de-  
11 sign, management, and operation of school facilities,  
12 including facilities used by students with disabilities  
13 or special needs;

14 (4) collaborates with federally funded pediatric  
15 environmental health centers to assist in on-site  
16 school environmental investigations;

17 (5) assists States and the public in better un-  
18 derstanding and improving the environmental health  
19 of children; and

20 (6) provides to the Office a biennial report of  
21 all activities carried out under this part, which the  
22 Director shall include in the report described in sec-  
23 tion 432(c).

24 (b) PUBLIC OUTREACH.—The Director shall ensure,  
25 to the maximum extent practicable, that the public clear-

1 inghouse established under section 434 receives and makes  
2 available—

3 (1) information from the Administrator of the  
4 Environmental Protection Agency that is contained  
5 in the report described in subsection (a)(6); and

6 (2) information on the exposure of children to  
7 environmental hazards in school facilities, as pro-  
8 vided by the Administrator of the Environmental  
9 Protection Agency.

10 **SEC. 446. AUTHORIZATION OF APPROPRIATIONS.**

11 There is authorized to be appropriated to carry out  
12 this part \$10,000,000 for the period of fiscal years 2008  
13 through 2012, to remain available until expended.

14 **PART III—STRENGTHENING FEDERAL**  
15 **LEADERSHIP**

16 **SEC. 451. INCENTIVES.**

17 As soon as practicable after the date of enactment  
18 of this Act, the Director shall identify incentives to encour-  
19 age the use of green buildings and related technology in  
20 the operations of the Federal Government, including  
21 through—

22 (1) the provision of recognition awards; and

23 (2) the maximum feasible retention of financial  
24 savings in the annual budgets of Federal agencies.



1   **SEC. 452. FEDERAL PROCUREMENT.**

2           (a) IN GENERAL.—Not later than 2 years after the  
3 date of enactment of this Act, the Director of the Office  
4 of Federal Procurement Policy, in consultation with the  
5 Director and the Under Secretary of Defense for Acquisi-  
6 tion, Technology, and Logistics, shall promulgate revisions  
7 of the applicable acquisition regulations, to take effect as  
8 of the date of promulgation of the revisions—

9           (1) to direct any Federal procurement execu-  
10 tives involved in the acquisition, construction, or  
11 major renovation (including contracting for the con-  
12 struction or major renovation) of any facility, to the  
13 maximum extent practicable—

14                   (A) to employ integrated design principles;

15                   (B) to optimize building and systems en-  
16 ergy performance;

17                   (C) to protect and conserve water;

18                   (D) to enhance indoor environmental qual-  
19 ity; and

20                   (E) to reduce environmental impacts of  
21 materials and waste flows; and

22           (2) to direct Federal procurement executives in-  
23 volved in leasing buildings, to give preference to the  
24 lease of facilities that, to the maximum extent  
25 practicable—

26                   (A) are energy-efficient; and

1 (B) have applied contemporary high-per-  
2 formance and sustainable design principles dur-  
3 ing construction or renovation.

4 (b) GUIDANCE.—Not later than 90 days after the  
5 date of promulgation of the revised regulations under sub-  
6 section (a), the Director shall issue guidance to all Federal  
7 procurement executives providing direction and the option  
8 to renegotiate the design of proposed facilities, renovations  
9 for existing facilities, and leased facilities to incorporate  
10 improvements that are consistent with this section.

11 **SEC. 453. FEDERAL GREEN BUILDING PERFORMANCE.**

12 (a) IN GENERAL.—Not later than October 31 of each  
13 of the 2 fiscal years following the fiscal year in which this  
14 Act is enacted, and at such times thereafter as the Comp-  
15 troller General of the United States determines to be ap-  
16 propriate, the Comptroller General of the United States  
17 shall, with respect to the fiscal years that have passed  
18 since the preceding report—

19 (1) conduct an audit of the implementation of  
20 this subtitle; and

21 (2) submit to the Office, the Committee, the  
22 Administrator, and Congress a report describing the  
23 results of the audit.

1 (b) CONTENTS.—An audit under subsection (a) shall  
2 include a review, with respect to the period covered by the  
3 report under subsection (a)(2), of—

4 (1) budget, life-cycle costing, and contracting  
5 issues, using best practices identified by the Comp-  
6 troller General of the United States and heads of  
7 other agencies in accordance with section 436;

8 (2) the level of coordination among the Office,  
9 the Office of Management and Budget, and relevant  
10 agencies;

11 (3) the performance of the Office in carrying  
12 out the implementation plan;

13 (4) the design stage of high-performance green  
14 building measures;

15 (5) high-performance building data that were  
16 collected and reported to the Office; and

17 (6) such other matters as the Comptroller Gen-  
18 eral of the United States determines to be appro-  
19 priate.

20 (c) ENVIRONMENTAL STEWARDSHIP SCORECARD.—

21 The Director shall consult with the Committee to enhance,  
22 and assist in the implementation of, the Environmental  
23 Stewardship Scorecard announced at the White House  
24 summit on Federal sustainable buildings in January 2006,

1 to measure the implementation by each Federal agency of  
2 sustainable design and green building initiatives.

3 **SEC. 454. STORM WATER RUNOFF REQUIREMENTS FOR**  
4 **FEDERAL DEVELOPMENT PROJECTS.**

5 The sponsor of any development or redevelopment  
6 project involving a Federal facility with a footprint that  
7 exceeds 5,000 square feet shall use site planning, design,  
8 construction, and maintenance strategies for the property  
9 to maintain, to the maximum extent technically feasible,  
10 the predevelopment hydrology of the property with regard  
11 to the temperature, rate, volume, and duration of flow.

12 **PART IV—DEMONSTRATION PROJECT**

13 **SEC. 461. COORDINATION OF GOALS.**

14 (a) IN GENERAL.—The Director shall establish  
15 guidelines to implement a demonstration project to con-  
16 tribute to the research goals of the Office.

17 (b) PROJECTS.—

18 (1) IN GENERAL.—In accordance with guide-  
19 lines established by the Director under subsection

20 (a) and the duties of the Director described in part  
21 I, the Director shall carry out 3 demonstration  
22 projects.

23 (2) LOCATION OF PROJECTS.—Each project  
24 carried out under paragraph (1) shall be located in

1 a Federal building in a State recommended by the  
2 Director in accordance with subsection (c).

3 (3) REQUIREMENTS.—Each project carried out  
4 under paragraph (1) shall—

5 (A) provide for the evaluation of the infor-  
6 mation obtained through the conduct of projects  
7 and activities under this subtitle; and

8 (B) achieve the highest available rating  
9 under the standard identified pursuant to sec-  
10 tion 432(d).

11 (c) CRITERIA.—With respect to the existing or pro-  
12 posed Federal facility at which a demonstration project  
13 under this section is conducted, the Federal facility  
14 shall—

15 (1) be an appropriate model for a project relat-  
16 ing to—

17 (A) the effectiveness of high-performance  
18 technologies;

19 (B) analysis of materials, components, and  
20 systems, including the impact on the health of  
21 building occupants;

22 (C) life-cycle costing and life-cycle assess-  
23 ment of building materials and systems; and

1 (D) location and design that promote ac-  
2 cess to the Federal facility through walking,  
3 biking, and mass transit; and

4 (2) possess sufficient technological and organi-  
5 zational adaptability.

6 (d) REPORT.—Not later than 1 year after the date  
7 of enactment of this Act, and annually thereafter through  
8 September 30, 2013, the Director shall submit to the Ad-  
9 ministrator a report that describes the status of and find-  
10 ings regarding the demonstration project.

11 **SEC. 462. AUTHORIZATION OF APPROPRIATIONS.**

12 There is authorized to be appropriated to carry out  
13 the Federal demonstration project described in section  
14 461(b) \$10,000,000 for the period of fiscal years 2008  
15 through 2012, to remain available until expended.

16 **TITLE V—CORPORATE AVERAGE**  
17 **FUEL ECONOMY STANDARDS**

18 **SEC. 501. SHORT TITLE.**

19 This title may be cited as the “Ten-in-Ten Fuel  
20 Economy Act”.

21 **SEC. 502. AVERAGE FUEL ECONOMY STANDARDS FOR**  
22 **AUTOMOBILES AND CERTAIN OTHER VEHI-**  
23 **CLES.**

24 (a) INCREASED STANDARDS.—Section 32902 of title  
25 49, United States Code, is amended—

1           (1) by striking “**NON-PASSENGER**  
2       **AUTOMOBILES.—**” in subsection (a) and in-  
3       serting “**PRESCRIPTION OF STANDARDS**  
4       **BY REGULATION.—**”;

5           (2) by striking “(except passenger auto-  
6       mobiles)” in subsection (a); and

7           (3) by striking subsection (b) and inserting the  
8       following:

9       “(b) STANDARDS FOR AUTOMOBILES AND CERTAIN  
10     OTHER VEHICLES.—

11           “(1) IN GENERAL.—The Secretary of Transpor-  
12       tation, after consultation with the Administrator of  
13       the Environmental Protection Agency, shall pre-  
14       scribe average fuel economy standards for—

15           “(A) automobiles manufactured by manu-  
16       facturers in each model year beginning with  
17       model year 2011 in accordance with subsection  
18       (c); and

19           “(B) commercial medium-duty or heavy-  
20       duty on-highway vehicles in accordance with  
21       subsection (k).

22           “(2) FUEL ECONOMY TARGET FOR AUTO-  
23       MOBILES.—

24           “(A) AUTOMOBILE FUEL ECONOMY AVER-  
25       AGE FOR MODEL YEARS 2011 THROUGH 2020.—

1           The Secretary shall prescribe average fuel econ-  
2           omy standards for automobiles in each model  
3           year beginning with model year 2011 to achieve  
4           a combined fuel economy average for model  
5           year 2020 of at least 35 miles per gallon for the  
6           fleet of automobiles manufactured or sold in the  
7           United States. The average fuel economy stand-  
8           ards prescribed by the Secretary shall be the  
9           maximum feasible average fuel economy stand-  
10          ards for model years 2011 through 2019.

11                 “(B) AUTOMOBILE FUEL ECONOMY AVER-  
12           AGE FOR MODEL YEARS 2021 THROUGH 2030.—  
13           For model years 2021 through 2030, the aver-  
14           age fuel economy required to be attained by the  
15           fleet of automobiles manufactured or sold in the  
16           United States shall be the maximum feasible  
17           average fuel economy standard for the fleet.

18                 “(C) PROGRESS TOWARD STANDARD RE-  
19           QUIRED.—In prescribing average fuel economy  
20           standards under subparagraph (A), the Sec-  
21           retary shall prescribe annual fuel economy  
22           standard increases that increase the applicable  
23           average fuel economy standard ratably begin-  
24           ning with model year 2011 and ending with  
25           model year 2020.”.



1 (b) FUEL ECONOMY TARGET FOR COMMERCIAL ME-  
2 DIUM-DUTY AND HEAVY-DUTY ON-HIGHWAY VEHI-  
3 CLES.—Section 32902 of title 49, United States Code, is  
4 amended by adding at the end thereof the following:

5 “(k) COMMERCIAL MEDIUM- AND HEAVY-DUTY ON-  
6 HIGHWAY VEHICLES.—

7 “(1) STUDY.—No later than 18 months after  
8 the date of enactment of the Ten-in-Ten Fuel Econ-  
9 omy Act, the Secretary of Transportation, in con-  
10 sultation with the Secretary of Energy and the Ad-  
11 ministrator of the Environmental Protection Agency,  
12 shall examine the fuel efficiency of commercial  
13 medium- and heavy-duty on-highway vehicles and  
14 determine—

15 “(A) the appropriate test procedures and  
16 methodologies for measuring commercial  
17 medium- and heavy-duty on-highway vehicle  
18 fuel efficiency;

19 “(B) the appropriate metric for measuring  
20 and expressing commercial medium- and heavy-  
21 duty on-highway vehicle fuel efficiency perform-  
22 ance, taking into consideration, among other  
23 things, the work performed by such on-highway  
24 vehicles and types of operations in which they  
25 are used;

1           “(C) the range of factors, including, with-  
2           out limitation, design, functionality, use, duty  
3           cycle, infrastructure, and total overall energy  
4           consumption and operating costs that effect  
5           commercial medium- and heavy-duty on-high-  
6           way vehicle fuel efficiency; and

7           “(D) such other factors and conditions  
8           that could have an impact on a program to im-  
9           prove commercial medium- and heavy-duty on-  
10          highway vehicle fuel efficiency.

11          “(2) RULEMAKING.—No later than 24 months  
12          after completion of the study required by paragraph  
13          (1), the Secretary, in consultation with the Secretary  
14          of Energy and the Administrator of the Environ-  
15          mental Protection Agency, by regulation, shall deter-  
16          mine in a rulemaking procedure how to implement  
17          a commercial medium- and heavy-duty on-highway  
18          vehicle fuel efficiency improvement program de-  
19          signed to achieve the maximum feasible improve-  
20          ment, and shall adopt appropriate test methods,  
21          measurement metrics, fuel economy standards, and  
22          compliance and enforcement protocols that are ap-  
23          propriate, cost-effective, and technologically feasible  
24          for commercial medium- and heavy-duty on-highway  
25          vehicles.

1           “(3) LEAD-TIME; REGULATORY STABILITY.—  
2       Any commercial medium- and heavy-duty on-high-  
3       way vehicle fuel efficiency regulatory program adopt-  
4       ed pursuant to this subsection shall provide no less  
5       than 4 full model years of regulatory lead-time and  
6       3 full model years of regulatory stability.

7           “(4) COMMERCIAL MEDIUM- AND HEAVY-DUTY  
8       ON-HIGHWAY VEHICLE DEFINED.—In this sub-  
9       section, the term ‘commercial medium- and heavy-  
10      duty on-highway vehicle’ means an on-highway vehi-  
11      cle with a gross vehicle weight rating of more than  
12      8,500 pounds, and that, in the case of a vehicle with  
13      a gross vehicle weight rating of less than 10,000  
14      pounds, is not an automobile.”.

15       (c) AUTHORITY OF SECRETARY.—Section 32902 of  
16 title 49, United States Code, as amended by subsection  
17 (b), is further amended by adding at the end thereof the  
18 following:

19       “(1) AUTHORITY OF THE SECRETARY.—

20           “(1) VEHICLE ATTRIBUTES; MODEL YEARS COV-  
21      ERED.—The Secretary shall—

22           “(A) prescribe by regulation average fuel  
23      economy standards for automobiles based on ve-  
24      hicle attributes related to fuel economy and to

1 express the standards in the form of a mathe-  
2 matical function; and

3 “(B) issue regulations under this title pre-  
4 scribing average fuel economy standards for 1  
5 or more model years.

6 “(2) PROHIBITION OF UNIFORM PERCENTAGE  
7 INCREASE.—When the Secretary prescribes a stand-  
8 ard, or prescribes an amendment under this section  
9 that changes a standard, the standard may not be  
10 expressed as a uniform percentage increase from the  
11 fuel-economy performance of attribute classes or cat-  
12 egories already achieved in a model year by a manu-  
13 facturer.”.

14 **SEC. 503. AMENDING FUEL ECONOMY STANDARDS.**

15 (a) IN GENERAL.—Section 32902(c) of title 49,  
16 United States Code, is amended to read as follows:

17 “(c) AMENDING FUEL ECONOMY STANDARDS.—Not-  
18 withstanding subsections (a) and (b), the Secretary of  
19 Transportation—

20 “(1) may prescribe a standard higher than that  
21 required under subsection (b); or

22 “(2) may prescribe an average fuel economy  
23 standard for automobiles that is the maximum fea-  
24 sible level for the model year, despite being lower  
25 than the standard required under subsection (b), if

1 the Secretary determines, based on clear and con-  
2 vincing evidence, that the average fuel economy  
3 standard prescribed in accordance with subsections  
4 (a) and (b) for automobiles in that model year is  
5 shown not to be cost-effective.”.

6 (b) FEASIBILITY CRITERIA.—Section 32902(f) of  
7 title 49, United States Code, is amended to read as fol-  
8 lows:

9 “(f) DECISIONS ON MAXIMUM FEASIBLE AVERAGE  
10 FUEL ECONOMY.—

11 “(1) IN GENERAL.—When deciding maximum  
12 feasible average fuel economy under this section, the  
13 Secretary shall consider—

14 “(A) economic practicability;

15 “(B) the effect of other motor vehicle  
16 standards of the Government on fuel economy;

17 “(C) environmental impacts; and

18 “(D) the need of the United States to con-  
19 serve energy.

20 “(2) LIMITATIONS.—In setting any standard  
21 under subsection (b), (c), or (d), the Secretary shall  
22 ensure that each standard is the highest standard  
23 that—

24 “(A) is technologically achievable;

1           “(B) can be achieved without materially  
2           reducing the overall safety of automobiles man-  
3           ufactured or sold in the United States;

4           “(C) is not less than the standard for that  
5           class of vehicles from any prior year; and

6           “(D) is cost-effective.

7           “(3) COST-EFFECTIVE DEFINED.—In this sub-  
8           section, the term ‘cost-effective’ means that the  
9           value to the United States of reduced fuel use from  
10          a proposed fuel economy standard is greater than or  
11          equal to the cost to the United States of such stand-  
12          ard. In determining cost-effectiveness, the Secretary  
13          shall give priority to those technologies and packages  
14          of technologies that offer the largest reduction in  
15          fuel use relative to their costs.

16          “(4) FACTORS FOR CONSIDERATION BY SEC-  
17          RETARY IN DETERMINING COST-EFFECTIVENESS.—  
18          The Secretary shall consult with the Administrator  
19          of the Environmental Protection Agency, and may  
20          consult with such other departments and agencies as  
21          the Secretary deems appropriate, and shall consider  
22          in the analysis the following factors:

23                  “(A) Economic security.

24                  “(B) The impact of the oil or energy inten-  
25          sity of the United States economy on the sensi-

1           tivity of the economy to oil and other fuel price  
2           changes, including the magnitude of gross do-  
3           mestic product losses in response to short term  
4           price shocks or long term price increases.

5           “(C) National security, including the im-  
6           pact of United States payments for oil and  
7           other fuel imports on political, economic, and  
8           military developments in unstable or unfriendly  
9           oil-exporting countries.

10          “(D) The uninternalized costs of pipeline  
11          and storage oil seepage, and for risk of oil spills  
12          from production, handling, and transport, and  
13          related landscape damage.

14          “(E) The emissions of pollutants including  
15          greenhouse gases over the lifecycle of the fuel  
16          and the resulting costs to human health, the  
17          economy, and the environment.

18          “(F) Such additional factors as the Sec-  
19          retary deems relevant.

20          “(5) MINIMUM VALUATION.—When considering  
21          the value to consumers of a gallon of gasoline saved,  
22          the Secretary of Transportation shall use as a min-  
23          imum value the greater of—

24                 “(A) the average value of gasoline prices  
25                 projected by the Energy Information Adminis-

1           tration over the period covered by the standard;

2           or

3           “(B) the average value of gasoline prices

4           for the 5-year period immediately preceding the

5           year in which the standard is established.”.

6       (c)     CONSULTATION        REQUIREMENT.—Section

7   32902(i) of title 49, United States Code, is amended by

8   inserting “and the Administrator of the Environmental

9   Protection Agency” after “Energy”.

10       (d) COMMENTS.—Section 32902(j) of title 49, United

11   States Code, is amended—

12           (1) by striking paragraph (1) and inserting

13       “(1) Before issuing a notice proposing to prescribe

14       or amend an average fuel economy standard under

15       subsection (b), (c), or (g) of this section, the Sec-

16       retary of Transportation shall give the Secretary of

17       Energy and Administrator of the Environmental

18       Protection Agency at least 30 days after the receipt

19       of the notice during which the Secretary of Energy

20       and Administrator may, if the Secretary of Energy

21       or Administrator concludes that the proposed stand-

22       ard would adversely affect the conservation goals of

23       the Secretary of Energy or environmental protection

24       goals of the Administrator, provide written com-

25       ments to the Secretary of Transportation about the



1 impact of the standard on those goals. To the extent  
2 the Secretary of Transportation does not revise a  
3 proposed standard to take into account comments of  
4 the Secretary of Energy or Administrator on any ad-  
5 verse impact of the standard, the Secretary of  
6 Transportation shall include those comments in the  
7 notice.”; and

8 (2) by inserting “and the Administrator” after  
9 “Energy” each place it appears in paragraph (2).

10 (e) ALTERNATIVE FUEL ECONOMY STANDARDS FOR  
11 LOW VOLUME MANUFACTURERS AND NEW ENTRANTS.—  
12 Section 32902(d) of title 49, United States Code, is  
13 amended to read as follows:

14 “(d) ALTERNATIVE AVERAGE FUEL ECONOMY  
15 STANDARD.—

16 “(1) IN GENERAL.—Upon the application of an  
17 eligible manufacturer, the Secretary of Transpor-  
18 tation may prescribe an alternative average fuel  
19 economy standard for automobiles manufactured by  
20 that manufacturer if the Secretary determines  
21 that—

22 “(A) the applicable standard prescribed  
23 under subsection (a), (b), or (c) is more strin-  
24 gent than the maximum feasible average fuel

1 economy level that manufacturer can achieve;  
2 and

3 “(B) the alternative average fuel economy  
4 standard prescribed under this subsection is the  
5 maximum feasible average fuel economy level  
6 that manufacturer can achieve.

7 “(2) APPLICATION OF ALTERNATIVE STAND-  
8 ARD.—The Secretary may provide for the applica-  
9 tion of an alternative average fuel economy standard  
10 prescribed under paragraph (1) to—

11 “(A) the manufacturer that applied for the  
12 alternative average fuel economy standard;

13 “(B) all automobiles to which this sub-  
14 section applies; or

15 “(C) classes of automobiles manufactured  
16 by eligible manufacturers.

17 “(3) IMPORTERS.—Notwithstanding paragraph  
18 (1), an importer registered under section 30141(c)  
19 may not be exempted as a manufacturer under para-  
20 graph (1) for an automobile that the importer—

21 “(A) imports; or

22 “(B) brings into compliance with applica-  
23 ble motor vehicle safety standards prescribed  
24 under chapter 301 for an individual described  
25 in section 30142.

1           “(4) APPLICATION.—The Secretary of Trans-  
2           portation may prescribe the contents of an applica-  
3           tion for an alternative average fuel economy stand-  
4           ard.

5           “(5) ELIGIBLE MANUFACTURER DEFINED.—In  
6           this section, the term ‘eligible manufacturer’ means  
7           a manufacturer that—

8                   “(A) is not owned in whole or in part by  
9                   another manufacturer that sold greater than  
10                  0.5 percent of the number of automobiles sold  
11                  in the United States in the model year prior to  
12                  the model year to which the application relates;

13                  “(B) sold in the United States fewer than  
14                  0.4 percent of the number of automobiles sold  
15                  in the United States in the model year that is  
16                  2 years before the model year to which the ap-  
17                  plication relates; and

18                  “(C) will sell in the United States fewer  
19                  than 0.4 percent of the automobiles sold in the  
20                  United States for the model year for which the  
21                  alternative average fuel economy standard will  
22                  apply.

23           “(6) LIMITATION.—For purposes of this sub-  
24           section, notwithstanding section 32901(a)(4), the  
25           term ‘automobile manufactured by a manufacturer’

1 includes every automobile manufactuered by a per-  
2 son that controls, is controlled by, or is under com-  
3 mon control with the manufacturer.

4 (f) TECHNICAL AND CONFORMING AMENDMENTS.—

5 (1) Section 32902(d) of title 49, United States  
6 Code, is amended by striking “passenger” each place  
7 it appears.

8 (2) Section 32902(g) of title 49, United States  
9 Code, is amended—

10 (A) by striking “subsection (a) or (d)”  
11 each place it appears in paragraph (1) and in-  
12 serting “subsection (b), (c), or (d)”;

13 (B) striking “(and submit the amendment  
14 to Congress when required under subsection  
15 (c)(2) of this section)” in paragraph (2).

16 **SEC. 504. DEFINITIONS.**

17 (a) IN GENERAL.—Section 32901(a) of title 49,  
18 United States Code, is amended—

19 (1) by striking paragraph (3) and inserting the  
20 following:

21 “(3) except as provided in section 32908 of this  
22 title, ‘automobile’ means a 4-wheeled vehicle that is  
23 propelled by fuel, or by alternative fuel, manufac-  
24 tured primarily for use on public streets, roads, and

1 highways and rated at not more than 10,000 pounds  
2 gross vehicle weight, except—

3 “(A) a vehicle operated only on a rail line;

4 “(B) a vehicle manufactured by 2 or more  
5 manufacturers in different stages and less than  
6 10,000 of which are manufactured per year; or

7 “(C) a work truck.”; and

8 (2) by adding at the end the following:

9 “(17) ‘work truck’ means an automobile that  
10 the Secretary determines by regulation—

11 “(A) is rated at between 8,500 and 10,000  
12 pounds gross vehicle weight; and

13 “(B) is not a medium-duty passenger vehi-  
14 cle (as defined in section 86.1803–01 of title  
15 40, Code of Federal Regulations).”.

16 (b) DEADLINE FOR REGULATIONS.—The Secretary  
17 of Transportation—

18 (1) shall issue proposed regulations imple-  
19 menting the amendments made by subsection (a) not  
20 later than 1 year after the date of enactment of this  
21 Act; and

22 (2) shall issue final regulations implementing  
23 the amendments not later than 18 months after the  
24 date of the enactment of this Act.

1 (c) EFFECTIVE DATE.—Regulations prescribed  
2 under subsection (b) shall apply beginning with model year  
3 2010.

4 **SEC. 505. ENSURING SAFETY OF AUTOMOBILES.**

5 (a) IN GENERAL.—Subchapter II of chapter 301 of  
6 title 49, United States Code, is amended by adding at the  
7 end the following:

8 **“§ 30129. Vehicle compatibility standard**

9 “(a) STANDARDS.—The Secretary of Transportation  
10 shall issue a motor vehicle safety standard to reduce auto-  
11 mobile incompatibility. The standard shall address charac-  
12 teristics necessary to ensure better management of crash  
13 forces in multiple vehicle frontal and side impact crashes  
14 between different types, sizes, and weights of automobiles  
15 with a gross vehicle weight of 10,000 pounds or less in  
16 order to decrease occupant deaths and injuries.

17 “(b) CONSUMER INFORMATION.—The Secretary shall  
18 develop and implement a public information side and fron-  
19 tal compatibility crash test program with vehicle ratings  
20 based on risks to occupants, risks to other motorists, and  
21 combined risks by vehicle make and model.”.

22 (b) RULEMAKING DEADLINES.—

23 (1) RULEMAKING.—The Secretary of Transpor-  
24 tation shall issue—

1 (A) a notice of a proposed rulemaking  
2 under section 30129 of title 49, United States  
3 Code, not later than January 1, 2012; and

4 (B) a final rule under such section not  
5 later than December 31, 2014.

6 (2) EFFECTIVE DATE OF REQUIREMENTS.—  
7 Any requirement imposed under the final rule issued  
8 under paragraph (1) shall become fully effective not  
9 later than September 1, 2018.

10 (c) CONFORMING AMENDMENT.—The chapter anal-  
11 ysis for chapter 301 is amended by inserting after the item  
12 relating to section 30128 the following:

*“30129. Vehicle compatibility standard”.*

13 **SEC. 506. CREDIT TRADING PROGRAM.**

14 Section 32903 of title 49, United States Code, is  
15 amended—

16 (1) by striking “passenger” each place it ap-  
17 pears;

18 (2) by striking “section 32902(b)-(d) of this  
19 title” each place it appears and inserting “sub-  
20 section (a), (c), or (d) of section 32902”;

21 (3) by striking “3 consecutive model years” in  
22 subsection (a)(2) and inserting “5 consecutive model  
23 years”;

1           (4) in subsection (a)(2), by striking “clause (1)  
2           of this subsection,” and inserting “paragraph (1)”;  
3           and

4           (5) by striking subsection (e) and inserting the  
5           following:

6           “(e) CREDIT TRADING AMONG MANUFACTURERS.—  
7           The Secretary of Transportation may establish, by regula-  
8           tion, a corporate average fuel economy credit trading pro-  
9           gram to allow manufacturers whose automobiles exceed  
10          the average fuel economy standards prescribed under sec-  
11          tion 32902 to earn credits to be sold to manufacturers  
12          whose automobiles fail to achieve the prescribed standards  
13          such that the total oil savings associated with manufactur-  
14          ers that exceed the prescribed standards are preserved  
15          when transferring credits to manufacturers that fail to  
16          achieve the prescribed standards.”.

17       **SEC. 507. LABELS FOR FUEL ECONOMY AND GREENHOUSE**  
18                               **GAS EMISSIONS.**

19          Section 32908 of title 49, United States Code, is  
20          amended—

21               (1) by redesignating subparagraph (F) of sub-  
22          section (b)(1) as subparagraph (H) and inserting  
23          after subparagraph (E) the following:

24               “(F) a label (or a logo imprinted on a label re-  
25          quired by this paragraph) that—



1           “(i) reflects an automobile’s performance  
2           on the basis of criteria developed by the Admin-  
3           istrator to reflect the fuel economy and green-  
4           house gas and other emissions consequences of  
5           operating the automobile over its likely useful  
6           life;

7           “(ii) permits consumers to compare per-  
8           formance results under clause (i) among all  
9           automobiles; and

10          “(iii) is designed to encourage the manu-  
11          facture and sale of automobiles that meet or ex-  
12          ceed applicable fuel economy standards under  
13          section 32902.

14          “(G) a fuelstar under paragraph (5).”; and  
15          (2) by adding at the end of subsection (b) the  
16          following:

17          “(4) GREEN LABEL PROGRAM.—

18               “(A) MARKETING ANALYSIS.—Not later than 2  
19          years after the date of the enactment of the Ten-in-  
20          Ten Fuel Economy Act, the Administrator shall im-  
21          plement a consumer education program and execute  
22          marketing strategies to improve consumer under-  
23          standing of automobile performance described in  
24          paragraph (1)(F).

1           “(B) ELIGIBILITY.—Not later than 3 years  
2           after the date described in subparagraph (A), the  
3           Administrator shall issue requirements for the label  
4           or logo required under paragraph (1)(F) to ensure  
5           that an automobile is not eligible for the label or  
6           logo unless it—

7                   “(i) meets or exceeds the applicable fuel  
8                   economy standard; or

9                   “(ii) will have the lowest greenhouse gas  
10                  emissions over the useful life of the vehicle of  
11                  all vehicles in the vehicle attribute class to  
12                  which it belongs in that model year.

13          “(5) FUELSTAR PROGRAM.—

14               “(A) IN GENERAL.—The Secretary shall estab-  
15               lish a program, to be known as the ‘Fuelstar Pro-  
16               gram’, under which stars shall be imprinted on or  
17               attached to the label required by paragraph (1).

18               “(B) GREEN STARS.—Under the Fuelstar Pro-  
19               gram, a manufacturer may include on the label  
20               maintained on an automobile under paragraph (1)—

21                   “(i) 1 green star for any automobile that  
22                   meets the average fuel economy standard for  
23                   the model year under section 32902; and

1                   “(ii) 1 additional green star for each 2  
2                   miles per gallon by which the automobile ex-  
3                   ceeds such standard.

4                   “(C) GOLD STARS.—Under the Fuelstar Pro-  
5                   gram, a manufacturer may include a gold star on  
6                   the label maintained on an automobile under para-  
7                   graph (1) if the automobile attains a fuel economy  
8                   of at least 50 miles per gallon.”.

9   **SEC. 508. CONTINUED APPLICABILITY OF EXISTING STAND-**  
10                   **ARDS.**

11                  Nothing in this title, or the amendments made by this  
12                  title, shall be construed to affect the application of section  
13                  32902 of title 49, United States Code, to passenger auto-  
14                  mobiles or non-passenger automobiles manufactured be-  
15                  fore model year 2011.

16   **SEC. 509. NATIONAL ACADEMY OF SCIENCES STUDIES.**

17                  (a) IN GENERAL.—As soon as practicable after the  
18                  date of enactment of this Act, the Secretary of Transpor-  
19                  tation shall execute an agreement with the National Acad-  
20                  emy of Sciences to develop a report evaluating vehicle fuel  
21                  economy standards, including—

22                   (1) an assessment of automotive technologies  
23                   and costs to reflect developments since the Acad-  
24                   emy’s 2002 report evaluating the corporate average  
25                   fuel economy standards was conducted;

1           (2) an analysis of existing and potential tech-  
2           nologies that may be used practically to improve  
3           automobile and medium-duty and heavy-duty truck  
4           fuel economy;

5           (3) an analysis of how such technologies may be  
6           practically integrated into the automotive and me-  
7           dium-duty and heavy-duty truck manufacturing  
8           process; and

9           (4) an assessment of how such technologies may  
10          be used to meet the new fuel economy standards  
11          under chapter 329 of title 49, United States Code,  
12          as amended by this title.

13          (b) QUINQUENNIAL UPDATES.—After submitting the  
14          initial report, the Academy shall update the report at 5  
15          year intervals thereafter through 2025.

16          (c) REPORT.—The Academy shall submit the report  
17          to the Secretary, the Senate Committee on Commerce,  
18          Science, and Transportation and the House of Represent-  
19          atives Committee on Energy and Commerce, with its find-  
20          ings and recommendations no later than 18 months after  
21          the date on which the Secretary executes the agreement  
22          with the Academy.

1 **SEC. 510. STANDARDS FOR EXECUTIVE AGENCY AUTO-**  
2 **MOBILES.**

3 (a) IN GENERAL.—Section 32917 of title 49, United  
4 States Code, is amended to read as follows:

5 **“§ 32917. Standards for Executive agency automobiles**

6 “(a) FUEL EFFICIENCY.—The head of an Executive  
7 agency shall ensure that each new automobile procured by  
8 the Executive agency is as fuel efficient as practicable.

9 “(b) DEFINITIONS.—In this section:

10 “(1) EXECUTIVE AGENCY.—The term ‘Execu-  
11 tive agency’ has the meaning given that term in sec-  
12 tion 105 of title 5.

13 “(2) NEW AUTOMOBILE.—The term ‘new auto-  
14 mobile’, with respect to the fleet of automobiles of  
15 an executive agency, means an automobile that is  
16 leased for at least 60 consecutive days or bought, by  
17 or for the Executive agency, after September 30,  
18 2008. The term does not include any vehicle de-  
19 signed for combat-related missions, law enforcement  
20 work, or emergency rescue work.”.

21 (b) REPORT.—The Administrator of the General  
22 Services Administration shall develop a report describing  
23 and evaluating the efforts of the heads of the Executive  
24 agencies to comply with section 32917 of title 49, United  
25 States Code, for fiscal year 2009. The Administrator shall

1 submit the report to Congress no later than December 31,  
2 2009.

3 **SEC. 511. INCREASING CONSUMER AWARENESS OF FLEXI-**  
4 **BLE FUEL AUTOMOBILES.**

5 Section 32908 of title 49, United States Code, is  
6 amended by adding at the end the following:

7 “(g) INCREASING CONSUMER AWARENESS OF FLEXI-  
8 BLE FUEL AUTOMOBILES.—(1) The Secretary of Energy,  
9 in consultation with the Secretary of Transportation, shall  
10 prescribe regulations that require the manufacturer of  
11 automobiles distributed in interstate commerce for sale in  
12 the United States—

13 “(A) to prominently display a permanent badge  
14 or emblem on the quarter panel or tailgate of each  
15 such automobile that indicates such vehicle is capa-  
16 ble of operating on alternative fuel; and

17 “(B) to include information in the owner’s man-  
18 ual of each such automobile information that  
19 describes—

20 “(i) the capability of the automobile to op-  
21 erate using alternative fuel;

22 “(ii) the benefits of using alternative fuel,  
23 including the renewable nature, and the envi-  
24 ronmental benefits of using alternative fuel; and

1           “(C) to contain a fuel tank cap that is clearly  
2           labeled to inform consumers that the automobile is  
3           capable of operating on alternative fuel.

4           “(2) The Secretary of Transportation shall collabo-  
5           rate with automobile retailers to develop voluntary meth-  
6           ods for providing prospective purchasers of automobiles  
7           with information regarding the benefits of using alter-  
8           native fuel in automobiles, including—

9           “(A) the renewable nature of alternative fuel;  
10          and

11          “(B) the environmental benefits of using alter-  
12          native fuel.”.

13   **SEC. 512. PERIODIC REVIEW OF ACCURACY OF FUEL ECON-**  
14                   **OMY LABELING PROCEDURES.**

15          Beginning in December, 2009, and not less often  
16          than every 5 years thereafter, the Administrator of the  
17          Environmental Protection Agency, in consultation with  
18          the Secretary of Transportation, shall—

19               (1) reevaluate the fuel economy labeling proce-  
20               dures described in the final rule published in the  
21               Federal Register on December 27, 2006 (71 Fed.  
22               Reg. 77,872; 40 C.F.R. parts 86 and 600) to deter-  
23               mine whether changes in the factors used to estab-  
24               lish the labeling procedures warrant a revision of  
25               that process; and

1           (2) submit a report to the Senate Committee on  
2       Commerce, Science, and Transportation and the  
3       House of Representatives Committee on Energy and  
4       Commerce that describes the results of the reevalua-  
5       tion process.

6   **SEC. 513. TIRE FUEL EFFICIENCY CONSUMER INFORMA-**  
7                           **TION.**

8       (a) IN GENERAL.—Chapter 301 of title 49, United  
9       States Code, is amended by inserting after section 30123  
10      the following new section:

11   **“§ 30123A. Tire fuel efficiency consumer information**

12       “(a) RULEMAKING.—

13           “(1) IN GENERAL.—Not later than 18 months  
14      after the date of enactment of the Ten-in-Ten Fuel  
15      Economy Act, the Secretary of Transportation shall,  
16      after notice and opportunity for comment, promul-  
17      gate rules establishing a national tire fuel efficiency  
18      consumer information program for tires designed for  
19      use on motor vehicles to educate consumers about  
20      the effect of tires on automobile fuel efficiency.

21           “(2) ITEMS INCLUDED IN RULE.—The rule-  
22      making shall include—

23           “(A) a national tire fuel efficiency rating  
24      system for motor vehicle tires to assist con-



1           sumers in making more educated tire pur-  
2           chasing decisions;

3           “(B) requirements for providing informa-  
4           tion to consumers, including information at the  
5           point of sale and other potential information  
6           dissemination methods, including the Internet;

7           “(C) specifications for test methods for  
8           manufacturers to use in assessing and rating  
9           tires to avoid variation among test equipment  
10          and manufacturers; and

11          “(D) a national tire maintenance consumer  
12          education program including, information on  
13          tire inflation pressure, alignment, rotation, and  
14          tread wear to maximize fuel efficiency.

15          “(3) APPLICABILITY.—This section shall not  
16          apply to tires excluded from coverage under section  
17          575.104(e)(2) of title 49, Code of Federal Regula-  
18          tions, as in effect on date of enactment of the Ten-  
19          in-Ten Fuel Economy Act.

20          “(b) CONSULTATION.—The Secretary shall consult  
21          with the Secretary of Energy and the Administrator of  
22          the Environmental Protection Agency on the means of  
23          conveying tire fuel efficiency consumer information.

24          “(c) REPORT TO CONGRESS.—The Secretary shall  
25          conduct periodic assessments of the rules promulgated

1 under this section to determine the utility of such rules  
2 to consumers, the level of cooperation by industry, and the  
3 contribution to national goals pertaining to energy con-  
4 sumption. The Secretary shall transmit periodic reports  
5 detailing the findings of such assessments to the Senate  
6 Committee on Commerce, Science, and Transportation  
7 and the House of Representatives Committee on Energy  
8 and Commerce.

9 “(d) TIRE MARKING.—The Secretary shall not re-  
10 quire permanent labeling of any kind on a tire for the pur-  
11 pose of tire fuel efficiency information.

12 “(e) PREEMPTION.—When a requirement under this  
13 section is in effect, a State or political subdivision of a  
14 State may adopt or enforce a law or regulation on tire  
15 fuel efficiency consumer information only if the law or reg-  
16 ulation is identical to that requirement. Nothing in this  
17 section shall be construed to preempt a State or political  
18 subdivision of a State from regulating the fuel efficiency  
19 of tires not otherwise preempted under this chapter.”.

20 (b) ENFORCEMENT.—Section 30165(a) of title 49,  
21 United States Code, is amended by adding at the end the  
22 following:

23 “(4) SECTION 30123a.—Any person who fails  
24 to comply with the national tire fuel efficiency con-  
25 sumer information program under section 30123A is

1        liable to the United States Government for a civil  
2        penalty of not more than \$50,000 for each viola-  
3        tion.”.

4        (c) Conforming Amendment.—The chapter analysis  
5        for chapter 301 of title 49, United States Code, is amend-  
6        ed by inserting after the item relating to section 30123  
7        the following:

*“30123A. Tire fuel efficiency consumer information”.*

8        **SEC. 514. ADVANCED BATTERY INITIATIVE.**

9        (a) IN GENERAL.—The Secretary of Energy, in con-  
10       sultation with the Secretary of Transportation, shall es-  
11       tablish and carry out an Advanced Battery Initiative in  
12       accordance with this section to support research, develop-  
13       ment, demonstration, and commercial application of bat-  
14       tery technologies.

15       (b) INDUSTRY ALLIANCE.—Not later than 180 days  
16       after the date of enactment of this Act, the Secretary shall  
17       competitively select an Industry Alliance to represent par-  
18       ticipants who are private, for-profit firms headquartered  
19       in the United States, the primary business of which is the  
20       manufacturing of batteries.

21       (c) RESEARCH.—

22                (1) GRANTS.—The Secretary shall carry out re-  
23       search activities of the Initiative through competi-  
24       tively-awarded grants to—

1 (A) researchers, including Industry Alli-  
2 ance participants;

3 (B) small businesses;

4 (C) National Laboratories; and

5 (D) institutions of higher education.

6 (2) INDUSTRY ALLIANCE.—The Secretary shall  
7 annually solicit from the Industry Alliance—

8 (A) comments to identify advanced battery  
9 technology and battery systems needs relevant  
10 to—

11 (i) electric drive technology; and

12 (ii) other applications the Secretary  
13 deems appropriate;

14 (B) an assessment of the progress of re-  
15 search activities of the Initiative; and

16 (C) assistance in annually updating ad-  
17 vanced battery technology and battery systems  
18 roadmaps.

19 (d) AVAILABILITY TO THE PUBLIC.—The informa-  
20 tion and roadmaps developed under this section shall be  
21 available to the public.

22 (e) PREFERENCE.—In making awards under this  
23 subsection, the Secretary shall give preference to partici-  
24 pants in the Industry Alliance.

1 (f) COST SHARING.—In carrying out this section, the  
2 Secretary shall require cost sharing in accordance with  
3 section 120(b) of title 23, United States Code.

4 (g) AUTHORIZATION OF APPROPRIATIONS.—There  
5 are authorized to be appropriated to carry out this section  
6 such sums as may be necessary for each of fiscal years  
7 2008 through 2012.

8 **SEC. 515. BIODIESEL STANDARDS.**

9 (a) IN GENERAL.—Not later than 180 days after the  
10 date of enactment of this Act, the Administrator of the  
11 Environmental Protection Agency, in consultation with  
12 the Secretary of Transportation and the Secretary of En-  
13 ergy, shall promulgate regulations to ensure that all diesel-  
14 equivalent fuels derived from renewable biomass that are  
15 introduced into interstate commerce are tested and cer-  
16 tified to comply with appropriate American Society for  
17 Testing and Materials standards.

18 (b) DEFINITIONS.—In this section:

19 (1) BIODIESEL.—

20 (A) IN GENERAL.—The term “biodiesel”  
21 means the monoalkyl esters of long chain fatty  
22 acids derived from plant or animal matter that  
23 meet—

24 (i) the registration requirements for  
25 fuels and fuel additives established by the

1 Environmental Protection Agency under  
2 section 211 of the Clean Air Act (42  
3 U.S.C. 7545); and

4 (ii) the requirements of the American  
5 Society of Testing and Materials D6751.

6 (B) INCLUSIONS.—The term “biodiesel”  
7 includes esters described in subparagraph (A)  
8 derived from—

9 (i) animal waste, including poultry  
10 fat, poultry waste, and other waste mate-  
11 rial; and

12 (ii) municipal solid waste, sludge, and  
13 oil derived from wastewater or the treat-  
14 ment of wastewater.

15 (2) BIODIESEL BLEND.—The term “biodiesel  
16 blend” means a mixture of biodiesel and diesel fuel,  
17 including—

18 (A) a blend of biodiesel and diesel fuel ap-  
19 proximately 5 percent of the content of which  
20 is biodiesel (commonly known as “B5”); and

21 (B) a blend of biodiesel and diesel fuel ap-  
22 proximately 20 percent of the content of which  
23 is biodiesel (commonly known as “B20”).

1   **SEC. 516. USE OF CIVIL PENALTIES FOR RESEARCH AND**  
2                   **DEVELOPMENT.**

3           Section 32912 of title 49, United States Code, is  
4   amended by adding at the end thereof the following:

5           “(e) USE OF CIVIL PENALTIES.—For fiscal year  
6   2008 and each fiscal year thereafter, from the total  
7   amount deposited in the general fund of the Treasury dur-  
8   ing the preceding fiscal year from fines, penalties, and  
9   other funds obtained through enforcement actions con-  
10   ducted pursuant to this section (including funds obtained  
11   under consent decrees), the Secretary of the Treasury,  
12   subject to the availability of appropriations, shall—

13           “(1) transfer 50 percent of such total amount  
14   to the account providing appropriations to the Sec-  
15   retary of Transportation for the administration of  
16   this chapter, which shall be used by the Secretary to  
17   carry out a program of research and development  
18   into fuel saving automotive technologies and to sup-  
19   port rulemaking under this chapter; and

20           “(2) transfer 50 percent of such total amount  
21   to the Energy Security Fund established by section  
22   517(a) of the Ten-in-Ten Fuel Economy Act.”.

23   **SEC. 517. ENERGY SECURITY FUND AND ALTERNATIVE**  
24                   **FUEL GRANT PROGRAM.**

25           (a) ESTABLISHMENT OF FUND.—

1           (1) IN GENERAL.—There is established in the  
2       Treasury a fund, to be known as the “Energy Secu-  
3       rity Fund” (referred to in this section as the  
4       “Fund”), consisting of—

5           (A) amounts transferred to the Fund  
6       under section 32912(e)(2) of title 49, United  
7       States Code; and

8           (B) amounts credited to the Fund under  
9       paragraph (2)(C).

10       (2) INVESTMENT OF AMOUNTS.—

11           (A) IN GENERAL.—The Secretary of the  
12       Treasury shall invest in interest-bearing obliga-  
13       tions of the United States such portion of the  
14       Fund as is not, in the judgment of the Sec-  
15       retary of the Treasury, required to meet cur-  
16       rent withdrawals.

17           (B) SALE OF OBLIGATIONS.—Any obliga-  
18       tion acquired by the Fund may be sold by the  
19       Secretary of the Treasury at the market price.

20           (C) CREDITS TO FUND.—The interest on,  
21       and the proceeds from the sale or redemption  
22       of, any obligations held in the Fund shall be  
23       credited to, and form a part of, the Fund in ac-  
24       cordance with section 9602 of the Internal Rev-  
25       enue Code of 1986.



1           (3) USE OF AMOUNTS IN FUND.—Amounts in  
2           the Fund shall be made available to the Secretary of  
3           Energy, subject to the availability of appropriations,  
4           to carry out the grant program under subsection (b).

5           (b) ALTERNATIVE FUELS GRANT PROGRAM.—

6           (1) IN GENERAL.—Not later than 90 days after  
7           the date of enactment of this Act, the Secretary of  
8           Energy, acting through the Clean Cities Program of  
9           the Department of Energy, shall establish and carry  
10          out a program under which the Secretary shall pro-  
11          vide grants to expand the availability to consumers  
12          of alternative fuels (as defined in section 32901(a)  
13          of title 49, United States Code).

14          (2) ELIGIBILITY.—

15                (A) IN GENERAL.—Except as provided in  
16                subparagraph (B), any entity that is eligible to  
17                receive assistance under the Clean Cities Pro-  
18                gram shall be eligible to receive a grant under  
19                this subsection.

20                (B) EXCEPTIONS.—

21                    (i) CERTAIN OIL COMPANIES.—A  
22                    large, vertically-integrated oil company  
23                    shall not be eligible to receive a grant  
24                    under this subsection.

1 (ii) PROHIBITION OF DUAL BENE-  
2 FITS.—An entity that receives any other  
3 Federal funds for the construction or ex-  
4 pansion of alternative refueling infrastruc-  
5 ture shall not be eligible to receive a grant  
6 under this subsection for the construction  
7 or expansion of the same alternative refuel-  
8 ing infrastructure.

9 (C) ENSURING COMPLIANCE.—Not later  
10 than 30 days after the date of enactment of  
11 this Act, the Secretary of Energy shall promul-  
12 gate regulations to ensure that, before receiving  
13 a grant under this subsection, an eligible entity  
14 meets applicable standards relating to the in-  
15 stallation, construction, and expansion of infra-  
16 structure necessary to increase the availability  
17 to consumers of alternative fuels (as defined in  
18 section 32901(a) of title 49, United States  
19 Code).

20 (3) MAXIMUM AMOUNT.—

21 (A) GRANTS.—The amount of a grant pro-  
22 vided under this subsection shall not exceed  
23 \$30,000.

24 (B) AMOUNT PER STATION.—An eligible  
25 entity shall receive not more than \$90,000

1 under this subsection for any station of the eli-  
2 gible entity during a fiscal year.

3 (4) USE OF FUNDS.—

4 (A) IN GENERAL.—A grant provided under  
5 this subsection shall be used for the construc-  
6 tion or expansion of alternative fueling infra-  
7 structure.

8 (B) ADMINISTRATIVE EXPENSES.—Not  
9 more than 3 percent of the amount of a grant  
10 provided under this subsection shall be used for  
11 administrative expenses.

12 **SEC. 518. AUTHORIZATION OF APPROPRIATIONS.**

13 There are authorized to be appropriated to the Sec-  
14 retary of Transportation \$25,000,000 for each of fiscal  
15 years 2009 through 2021 to carry out the provisions of  
16 chapter 329 of title 49, United States Code.

17 **SEC. 519. APPLICATION WITH CLEAN AIR ACT.**

18 Nothing in this title shall be construed to conflict  
19 with the authority provided by sections 202 and 209 of  
20 the Clean Air Act (42 U.S.C. 7521 and 7543, respec-  
21 tively).

22 **SEC. 520. ALTERNATIVE FUEL VEHICLE ACTION PLAN.**

23 (a) IN GENERAL.—The Secretary of Transportation  
24 shall, establish and implement an action plan which takes  
25 into consideration the availability and cost effectiveness of

1 alternative fuels, which will ensure that, beginning with  
2 model year 2015, the percentage of new automobiles for  
3 sale in the United States that are alternative fuel auto-  
4 mobiles is not less than 50 percent.

5 (b) DEFINITIONS.—In this section:

6 (1) ALTERNATIVE FUEL AUTOMOBILE.—The  
7 term “alternative fuel automobile” means the fol-  
8 lowing but not limited to—

9 (A) a new advanced lean burn technology  
10 motor vehicle (as defined in section 30B(e)(3)  
11 of the Internal Revenue Code of 1986) that  
12 achieves at least 125 percent of the model year  
13 2002 city fuel economy;

14 (B) an alternative fueled automobile;

15 (C) a flexible fuel automobile;

16 (D) a new qualified fuel cell motor vehicle  
17 (as defined in section 30B(e)(4) of such Code).

18 (E) a new qualified hybrid motor vehicle  
19 (as defined in section 30B(d)(3) of such Code);

20 (F) a plug-in hybrid automobile;

21 (G) an electric automobile;

22 (H) a hydrogen internal combustion engine  
23 automobile; and

24 (I) any other automobile that uses sub-  
25 stantially new technology and achieves at least

1           175 percent of the model year 2002 city fuel  
2           economy, as determined by the Secretary of  
3           Transportation, by regulation.

4           (2) OTHER TERMS.—Any term used in this sec-  
5           tion that is defined in section 32901 of title 49,  
6           United States Code, has the meaning given that  
7           term in that section.

8   **SEC. 521. STUDY OF THE ADEQUACY OF TRANSPORTATION**  
9                   **OF DOMESTICALLY-PRODUCED RENEWABLE**  
10                   **FUEL BY RAILROADS AND OTHER MODES OF**  
11                   **TRANSPORTATION.**

12       (a) STUDY.—

13           (1) IN GENERAL.—The Secretary of Transpor-  
14           tation and the Secretary of Energy shall jointly con-  
15           duct a study of the adequacy of transportation of  
16           domestically-produced renewable fuels by railroad  
17           and other modes of transportation as designated by  
18           the Secretaries.

19           (2) COMPONENTS.—In conducting the study  
20           under paragraph (1), the Secretaries shall—

21                (A) consider the adequacy of existing rail-  
22                road and other transportation infrastructure,  
23                equipment, service and capacity to move the  
24                necessary quantities of domestically-produced

1 renewable fuel within the timeframes required  
2 by section 111;

3 (B)(i) consider the projected costs of mov-  
4 ing the domestically-produced renewable fuel by  
5 railroad and other modes transportation; and

6 (ii) consider the impact of the projected  
7 costs on the marketability of the domestically-  
8 produced renewable fuel;

9 (C) identify current and potential impedi-  
10 ments to the reliable transportation of adequate  
11 supplies of domestically-produced renewable fuel  
12 at reasonable prices, including practices cur-  
13 rently utilized by domestic producers, shippers,  
14 and receivers of renewable fuels;

15 (D) consider whether inadequate competi-  
16 tion exists within and between modes of trans-  
17 portation for the transportation of domestically-  
18 produced renewable fuel and, if such inadequate  
19 competition exists, whether such inadequate  
20 competition leads to an unfair price for the  
21 transportation of domestically-produced renew-  
22 able fuel or unacceptable service for transpor-  
23 tation of domestically-produced renewable fuel;

24 (E) consider whether Federal agencies  
25 have adequate legal authority to address in-

1           stances of inadequate competition when inad-  
2           equated competition is found to prevent domestic  
3           producers for renewable fuels from obtaining a  
4           fair and reasonable transportation price or ac-  
5           ceptable service for the transportation of do-  
6           mestically-produced renewable fuels;

7           (F) consider whether Federal agencies  
8           have adequate legal authority to address rail-  
9           road and transportation service problems that  
10          may be resulting in inadequate supplies of do-  
11          mestically-produced renewable fuel in any area  
12          of the United States;

13          (G) consider what transportation infra-  
14          structure capital expenditures may be necessary  
15          to ensure the reliable transportation of ade-  
16          quate supplies of domestically-produced renew-  
17          able fuel at reasonable prices within the United  
18          States and which public and private entities  
19          should be responsible for making such expendi-  
20          tures; and

21          (K) provide recommendations on ways to  
22          facilitate the reliable transportation of adequate  
23          supplies of domestically-produced renewable fuel  
24          at reasonable prices.

1 (b) REPORT.—Not later than 180 days after the date  
2 of enactment of this Act, the Secretaries shall jointly sub-  
3 mit to the Committee on Commerce, Science and Trans-  
4 portation, the Committee on Energy and Natural Re-  
5 sources, and the Committee on Environment and Public  
6 Works of the Senate and the Committee on Transpor-  
7 tation and Infrastructure and the Committee on Energy  
8 and Commerce of the House of Representatives a report  
9 that describes the results of the study conducted under  
10 subsection (a).

11 **TITLE VI—ENERGY DIPLOMACY**  
12 **AND SECURITY**

13 **SEC. 601. SHORT TITLE.**

14 This title may be cited as the “Energy Diplomacy and  
15 Security Act of 2007”.

16 **SEC. 602. DEFINITIONS.**

17 In this title:

18 (1) MAJOR ENERGY PRODUCER.—The term  
19 “major energy producer” means a country that—

20 (A) had crude oil, oil sands, or natural gas  
21 to liquids production of 1,000,000 barrels per  
22 day or greater average in the previous year;

23 (B) has crude oil, shale oil, or oil sands re-  
24 serves of 6,000,000,000 barrels or greater, as  
25 recognized by the Department of Energy;



1 (C) had natural gas production of  
2 30,000,000,000 cubic meters or greater in the  
3 previous year;

4 (D) has natural gas reserves of  
5 1,250,000,000,000 cubic meters or greater, as  
6 recognized by the Department of Energy; or

7 (E) is a direct supplier of natural gas or  
8 liquefied natural gas to the United States.

9 (2) MAJOR ENERGY CONSUMER.—The term  
10 “major energy consumer” means a country that—

11 (A) had an oil consumption average of  
12 1,000,000 barrels per day or greater in the pre-  
13 vious year;

14 (B) had an oil consumption growth rate of  
15 8 percent or greater in the previous year;

16 (C) had a natural gas consumption of  
17 30,000,000,000 cubic meters or greater in the  
18 previous year; or

19 (D) had a natural gas consumption growth  
20 rate of 15 percent or greater in the previous  
21 year.

22 **SEC. 603. SENSE OF CONGRESS ON ENERGY DIPLOMACY**  
23 **AND SECURITY.**

24 (a) FINDINGS.—Congress makes the following find-  
25 ings:

1           (1) It is imperative to the national security and  
2           prosperity of the United States to have reliable, af-  
3           fordable, clean, sufficient, and sustainable sources of  
4           energy.

5           (2) United States dependence on oil imports  
6           causes tremendous costs to the United States na-  
7           tional security, economy, foreign policy, military, and  
8           environmental sustainability.

9           (3) Energy security is a priority for the govern-  
10          ments of many foreign countries and increasingly  
11          plays a central role in the relations of the United  
12          States Government with foreign governments. Global  
13          reserves of oil and natural gas are concentrated in  
14          a small number of countries. Access to these oil and  
15          natural gas supplies depends on the political will of  
16          these producing states. Competition between govern-  
17          ments for access to oil and natural gas reserves can  
18          lead to economic, political, and armed conflict. Oil  
19          exporting states have received dramatically increased  
20          revenues due to high global prices, enhancing the  
21          ability of some of these states to act in a manner  
22          threatening to global stability.

23          (4) Efforts to combat poverty and protect the  
24          environment are hindered by the continued predomi-  
25          nance of oil and natural gas in meeting global en-

1       ergy needs. Development of renewable energy  
2       through sustainable practices will help lead to a re-  
3       duction in greenhouse gas emissions and enhance  
4       international development.

5           (5) Cooperation on energy issues between the  
6       United States Government and the governments of  
7       foreign countries is critical for securing the strategic  
8       and economic interests of the United States and of  
9       partner governments. In the current global energy  
10      situation, the energy policies and activities of the  
11      governments of foreign countries can have dramatic  
12      impacts on United States energy security.

13      (b) SENSE OF CONGRESS.—It is the sense of Con-  
14      gress that—

15           (1) United States national security requires  
16      that the United States Government have an energy  
17      policy that pursues the strategic goal of achieving  
18      energy security through access to clean, affordable,  
19      sufficient, reliable, and sustainable sources of en-  
20      ergy;

21           (2) achieving energy security is a priority for  
22      United States foreign policy and requires continued  
23      and enhanced engagement with foreign governments  
24      and entities in a variety of areas, including activities  
25      relating to the promotion of alternative and renew-

1       able fuels, trade and investment in oil, coal, and nat-  
2       ural gas, energy efficiency, climate and environ-  
3       mental protection, data transparency, advanced sci-  
4       entific research, public-private partnerships, and en-  
5       ergy activities in international development;

6               (3) the President should ensure that the inter-  
7       national energy activities of the United States Gov-  
8       ernment are given clear focus to support the na-  
9       tional security needs of the United States, and to  
10      this end, there should be established a mechanism to  
11      coordinate the implementation of United States  
12      international energy policy among the Federal agen-  
13      cies engaged in relevant agreements and activities;  
14      and

15              (4) the Secretary of State should ensure that  
16      energy security is integrated into the core mission of  
17      the Department of State, and to this end, there  
18      should be established within the Office of the Sec-  
19      retary of State a Coordinator for International En-  
20      ergy Affairs with responsibility for—

21                   (A) developing United States international  
22                   energy policy in coordination with the Depart-  
23                   ment of Energy and other relevant Federal  
24                   agencies;

1 (B) working with appropriate United  
2 States Government officials to develop and up-  
3 date analyses of the national security implica-  
4 tions of global energy developments;

5 (C) incorporating energy security priorities  
6 into the activities of the Department;

7 (D) coordinating activities with relevant  
8 Federal agencies; and

9 (E) coordinating energy security and other  
10 relevant functions currently undertaken by of-  
11 fices within the Bureau of Economic, Business,  
12 and Agricultural Affairs, the Bureau of Democ-  
13 racy and Global Affairs, and other offices with-  
14 in the Department of State.

15 (5) the Department of Energy should be des-  
16 ignated as the lead United States Government agen-  
17 cy in charge of formulating and coordinating the na-  
18 tional energy security policy of the United States,  
19 and in furtherance of these goals, there should be  
20 established within the Department of Energy an As-  
21 sistant Secretary of Energy for Energy Security  
22 whose responsibilities should include—

23 (A) directing the development of the na-  
24 tional energy security strategy of the United  
25 States;

1 (B) coordinating the national energy secu-  
2 rity policy of the United States with the De-  
3 partment of Defense, the Department of State,  
4 and the National Security Council, as appro-  
5 priate, to address the impact of, and integrate  
6 national security and foreign policy on, the na-  
7 tional energy security policy of the United  
8 States;

9 (C) monitoring international and domestic  
10 energy developments to gauge their impact on  
11 the national energy security policy of the  
12 United States and implementing changes in  
13 such policy as necessary to maintain the na-  
14 tional security and energy security of the  
15 United States;

16 (D) identifying foreign sources of energy  
17 critical to the national energy security of the  
18 United States and developing strategies in con-  
19 junction with the Department of State for en-  
20 suring United States access to critical foreign  
21 energy resources;

22 (E) developing strategies for reducing  
23 United States dependence on foreign sources of  
24 energy, including demand reduction, efficiency

1 improvement, and development of alternative  
2 and new sources of domestic energy; and

3 (F) developing strategies in conjunction  
4 with the Department of State for working with  
5 major international producers and consumers,  
6 including China, Russia, the European Union,  
7 and Africa, to minimize politicization of global  
8 energy resources while ensuring access through  
9 global energy markets.

10 **SEC. 604. STRATEGIC ENERGY PARTNERSHIPS.**

11 (a) FINDINGS.—Congress makes the following find-  
12 ings:

13 (1) United States Government partnership with  
14 foreign governments and entities, including partner-  
15 ship with the private sector, for securing reliable and  
16 sustainable energy is imperative to ensuring United  
17 States security and economic interests, promoting  
18 international peace and security, expanding inter-  
19 national development, supporting democratic reform,  
20 fostering economic growth, and safeguarding the en-  
21 vironment.

22 (2) Democracy and freedom should be promoted  
23 globally by partnership with foreign governments, in-  
24 cluding in particular governments of emerging de-  
25 mocracies such as those of Ukraine and Georgia, in

1       their efforts to reduce their dependency on oil and  
2       natural gas imports.

3           (3) The United States Government and the gov-  
4       ernments of foreign countries have common needs  
5       for adequate, reliable, affordable, clean, and sustain-  
6       able energy in order to ensure national security, eco-  
7       nomic growth, and high standards of living in their  
8       countries. Cooperation by the United States Govern-  
9       ment with foreign governments on meeting energy  
10      security needs is mutually beneficial. United States  
11      Government partnership with foreign governments  
12      should include cooperation with major energy con-  
13      suming countries, major energy producing countries,  
14      and other governments seeking to advance global en-  
15      ergy security through reliable and sustainable  
16      means.

17           (4) The United States Government participates  
18      in hundreds of bilateral and multilateral energy  
19      agreements and activities with foreign governments  
20      and entities. These agreements and activities should  
21      reflect the strategic need for energy security.

22      (b) STATEMENT OF POLICY.—It is the policy of the  
23      United States—

24           (1) to advance global energy security through  
25      cooperation with foreign governments and entities;



1           (2) to promote reliable, diverse, and sustainable  
2           sources of all types of energy;

3           (3) to increase global availability of renewable  
4           and clean sources of energy;

5           (4) to decrease global dependence on oil and  
6           natural gas energy sources; and

7           (5) to engage in energy cooperation to strength-  
8           en strategic partnerships that advance peace, secu-  
9           rity, and democratic prosperity.

10          (c) AUTHORITY.—The Secretary of State, in coordi-  
11          nation with the Secretary of Energy, should immediately  
12          seek to establish and expand strategic energy partnerships  
13          with the governments of major energy producers and  
14          major energy consumers, and with governments of other  
15          countries (but excluding any countries that are ineligible  
16          to receive United States economic or military assistance).

17          (d) PURPOSES.—The purposes of the strategic energy  
18          partnerships established pursuant to subsection (c) are—

19                (1) to strengthen global relationships to pro-  
20                mote international peace and security through fos-  
21                tering cooperation in the energy sector on a mutu-  
22                ally beneficial basis in accordance with respective na-  
23                tional energy policies;

24                (2) to promote the policy set forth in subsection  
25          (b), including activities to advance—

1 (A) the mutual understanding of each  
2 country's energy needs, priorities, and policies,  
3 including interparliamentary understanding;

4 (B) measures to respond to acute energy  
5 supply disruptions, particularly in regard to pe-  
6 troleum and natural gas resources;

7 (C) long-term reliability and sustainability  
8 in energy supply;

9 (D) the safeguarding and safe handling of  
10 nuclear fuel;

11 (E) human and environmental protection;

12 (F) renewable energy production;

13 (G) access to reliable and affordable en-  
14 ergy for underdeveloped areas, in particular en-  
15 ergy access for the poor;

16 (H) appropriate commercial cooperation;

17 (I) information reliability and trans-  
18 parency; and

19 (J) research and training collaboration;

20 (3) to advance the national security priority of  
21 developing sustainable and clean energy sources, in-  
22 cluding through research and development related  
23 to, and deployment of—

24 (A) renewable electrical energy sources, in-  
25 cluding biomass, wind, and solar;

1 (B) renewable transportation fuels, includ-  
2 ing biofuels;

3 (C) clean coal technologies;

4 (D) carbon sequestration, including in con-  
5 junction with power generation, agriculture, and  
6 forestry; and

7 (E) energy and fuel efficiency, including  
8 hybrids and plug-in hybrids, flexible fuel, ad-  
9 vanced composites, hydrogen, and other trans-  
10 portation technologies; and

11 (4) to provide strategic focus for current and  
12 future United States Government activities in energy  
13 cooperation to meet the global need for energy secu-  
14 rity.

15 (e) DETERMINATION OF AGENDAS.—In general, the  
16 specific agenda with respect to a particular strategic en-  
17 ergy partnership, and the Federal agencies designated to  
18 implement related activities, shall be determined by the  
19 Secretary of State and the Secretary of Energy.

20 (f) USE OF CURRENT AGREEMENTS TO ESTABLISH  
21 PARTNERSHIPS.—Some or all of the purposes of the stra-  
22 tegic energy partnerships established under subsection (c)  
23 may be pursued through existing bilateral or multilateral  
24 agreements and activities. Such agreements and activities

1 shall be subject to the reporting requirements in sub-  
2 section (g).

3 (g) REPORTS REQUIRED.—

4 (1) INITIAL PROGRESS REPORT.—Not later  
5 than 180 days after the date of the enactment of  
6 this Act, the Secretary of State shall submit to the  
7 appropriate congressional committees a report on  
8 progress made in developing the strategic energy  
9 partnerships authorized under this section.

10 (2) ANNUAL PROGRESS REPORTS.—

11 (A) IN GENERAL.—Not later than one year  
12 after the date of the enactment of this Act, and  
13 annually thereafter for 20 years, the Secretary  
14 of State shall submit to the appropriate con-  
15 gressional committees an annual report on  
16 agreements entered into and activities under-  
17 taken pursuant to this section, including inter-  
18 national environment activities.

19 (B) CONTENT.—Each report submitted  
20 under this paragraph shall include details on—

21 (i) agreements and activities pursued  
22 by the United States Government with for-  
23 eign governments and entities, the imple-  
24 mentation plans for such agreements and  
25 progress measurement benchmarks, United

1 States Government resources used in pur-  
2 suit of such agreements and activities, and  
3 legislative changes recommended for im-  
4 proved partnership; and

5 (ii) policies and actions in the energy  
6 sector of partnership countries pertinent to  
7 United States economic, security, and envi-  
8 ronmental interests.

9 **SEC. 605. INTERNATIONAL ENERGY CRISIS RESPONSE**  
10 **MECHANISMS.**

11 (a) FINDINGS.—Congress makes the following find-  
12 ings:

13 (1) Cooperation between the United States Gov-  
14 ernment and governments of other countries during  
15 energy crises promotes the national security of the  
16 United States.

17 (2) The participation of the United States in  
18 the International Energy Program established under  
19 the Agreement on an International Energy Program,  
20 done at Paris November 18, 1974 (27 UST 1685),  
21 including in the coordination of national strategic  
22 petroleum reserves, is a national security asset  
23 that—

1 (A) protects the consumers and the econ-  
2 omy of the United States in the event of a  
3 major disruption in petroleum supply;

4 (B) maximizes the effectiveness of the  
5 United States strategic petroleum reserve  
6 through cooperation in accessing global reserves  
7 of various petroleum products;

8 (C) provides market reassurance in coun-  
9 tries that are members of the International En-  
10 ergy Program; and

11 (D) strengthens United States Government  
12 relationships with members of the International  
13 Energy Program.

14 (3) The International Energy Agency projects  
15 that the largest growth in demand for petroleum  
16 products, other than demand from the United  
17 States, will come from China and India, which are  
18 not members of the International Energy Program.  
19 The Governments of China and India vigorously  
20 pursue access to global oil reserves and are attempt-  
21 ing to develop national petroleum reserves. Partici-  
22 pation of the Governments of China and India in an  
23 international petroleum reserve mechanism would  
24 promote global energy security, but such participa-  
25 tion should be conditional on the Governments of

1 China and India abiding by customary petroleum re-  
2 serve management practices.

3 (4) In the Western Hemisphere, only the  
4 United States and Canada are members of the  
5 International Energy Program. The vulnerability of  
6 most Western Hemisphere countries to supply dis-  
7 ruptions from political, natural, or terrorism causes  
8 may introduce instability in the hemisphere and can  
9 be a source of conflict, despite the existence of major  
10 oil reserves in the hemisphere.

11 (5) Countries that are not members of the  
12 International Energy Program and are unable to  
13 maintain their own national strategic reserves are  
14 vulnerable to petroleum supply disruption. Disrup-  
15 tion in petroleum supply and spikes in petroleum  
16 costs could devastate the economies of developing  
17 countries and could cause internal or interstate con-  
18 flict.

19 (6) The involvement of the United States Gov-  
20 ernment in the extension of international mecha-  
21 nisms to coordinate strategic petroleum reserves and  
22 the extension of other emergency preparedness  
23 measures should strengthen the current Inter-  
24 national Energy Program.

1 (b) ENERGY CRISIS RESPONSE MECHANISMS WITH  
2 INDIA AND CHINA.—

3 (1) AUTHORITY.—The Secretary of State, in  
4 coordination with the Secretary of Energy, should  
5 immediately seek to establish a petroleum crisis re-  
6 sponse mechanism or mechanisms with the Govern-  
7 ments of China and India.

8 (2) SCOPE.—The mechanism or mechanisms es-  
9 tablished under paragraph (1) should include—

10 (A) technical assistance in the development  
11 and management of national strategic petro-  
12 leum reserves;

13 (B) agreements for coordinating  
14 drawdowns of strategic petroleum reserves with  
15 the United States, conditional upon reserve  
16 holdings and management conditions estab-  
17 lished by the Secretary of Energy;

18 (C) emergency demand restraint measures;

19 (D) fuel switching preparedness and alter-  
20 native fuel production capacity; and

21 (E) ongoing demand intensity reduction  
22 programs.

23 (3) USE OF EXISTING AGREEMENTS TO ESTAB-  
24 LISH MECHANISM.—The Secretary may, after con-  
25 sultation with Congress and in accordance with ex-



1       isting international agreements, including the Inter-  
2       national Energy Program, include China and India  
3       in a petroleum crisis response mechanism through  
4       existing or new agreements.

5       (c) ENERGY CRISIS RESPONSE MECHANISM FOR THE  
6       WESTERN HEMISPHERE.—

7               (1) AUTHORITY.—The Secretary of State, in  
8       coordination with the Secretary of Energy, should  
9       immediately seek to establish a Western Hemisphere  
10      energy crisis response mechanism.

11              (2) SCOPE.—The mechanism established under  
12      paragraph (1) should include—

13              (A) an information sharing and coordi-  
14      nating mechanism in case of energy supply  
15      emergencies;

16              (B) technical assistance in the development  
17      and management of national strategic petro-  
18      leum reserves within countries of the Western  
19      Hemisphere;

20              (C) technical assistance in developing na-  
21      tional programs to meet the requirements of  
22      membership in a future international energy ap-  
23      plication procedure as described in subsection  
24      (d);

25              (D) emergency demand restraint measures;

1 (E) energy switching preparedness and al-  
2 ternative energy production capacity; and

3 (F) ongoing demand intensity reduction  
4 programs.

5 (3) MEMBERSHIP.—The Secretary should seek  
6 to include in the Western Hemisphere energy crisis  
7 response mechanism membership for each major en-  
8 ergy producer and major energy consumer in the  
9 Western Hemisphere and other members of the  
10 Hemisphere Energy Cooperation Forum authorized  
11 under section 606.

12 (d) INTERNATIONAL ENERGY PROGRAM APPLICA-  
13 TION PROCEDURE.—

14 (1) AUTHORITY.—The President should place  
15 on the agenda for discussion at the Governing Board  
16 of the International Energy Agency, as soon as prac-  
17 ticable, the merits of establishing an international  
18 energy program application procedure.

19 (2) PURPOSE.—The purpose of such procedure  
20 is to allow countries that are not members of the  
21 International Energy Program to apply to the Gov-  
22 erning Board of the International Energy Agency  
23 for allocation of petroleum reserve stocks in times of  
24 emergency on a grant or loan basis. Such countries  
25 should also receive technical assistance for, and be

1 subject to, conditions requiring development and  
2 management of national programs for energy emer-  
3 gency preparedness, including demand restraint, fuel  
4 switching preparedness, and development of alter-  
5 native fuels production capacity.

6 (e) REPORTS REQUIRED.—

7 (1) PETROLEUM RESERVES.—Not later than  
8 180 days after the date of the enactment of this Act,  
9 the Secretary of Energy shall submit to the appro-  
10 priate congressional committees a report that evalu-  
11 ates the options for adapting the United States na-  
12 tional strategic petroleum reserve and the inter-  
13 national petroleum reserve coordinating mechanism  
14 in order to carry out this section.

15 (2) CRISIS RESPONSE MECHANISMS.—Not later  
16 than 180 days after the date of the enactment of  
17 this Act, the Secretary of State, in coordination with  
18 the Secretary of Energy, shall submit to the appro-  
19 priate congressional committees a report on the sta-  
20 tus of the establishment of the international petro-  
21 leum crisis response mechanisms described in sub-  
22 sections (b) and (c). The report shall include rec-  
23 ommendations of the Secretary of State and the Sec-  
24 retary of Energy for any legislation necessary to es-  
25 tablish or carry out such mechanisms.

1 (3) EMERGENCY APPLICATION PROCEDURE.—

2 Not later than 60 days after a discussion by the  
3 Governing Board of the International Energy Agen-  
4 cy of the application procedure described under sub-  
5 section (d), the President should submit to Congress  
6 a report that describes—

7 (A) the actions the United States Govern-  
8 ment has taken pursuant to such subsection;  
9 and

10 (B) a summary of the debate on the mat-  
11 ter before the Governing Board of the Inter-  
12 national Energy Agency, including any decision  
13 that has been reached by the Governing Board  
14 with respect to the matter.

15 **SEC. 606. HEMISPHERE ENERGY COOPERATION FORUM.**

16 (a) FINDINGS.—Congress makes the following find-  
17 ings:

18 (1) The engagement of the United States Gov-  
19 ernment with governments of countries in the West-  
20 ern Hemisphere is a strategic priority for reducing  
21 the potential for tension over energy resources,  
22 maintaining and expanding reliable energy supplies,  
23 expanding use of renewable energy, and reducing the  
24 detrimental effects of energy import dependence  
25 within the hemisphere. Current energy dialogues

1       should be expanded and refocused as needed to meet  
2       this challenge.

3           (2) Countries of the Western Hemisphere can  
4       most effectively meet their common needs for energy  
5       security and sustainability through partnership and  
6       cooperation. Cooperation between governments on  
7       energy issues will enhance bilateral relationships  
8       among countries of the hemisphere. The Western  
9       Hemisphere is rich in natural resources, including  
10      biomass, oil, natural gas, coal, and has significant  
11      opportunity for production of renewable hydro, solar,  
12      wind, and other energies. Countries of the Western  
13      Hemisphere can provide convenient and reliable  
14      markets for trade in energy goods and services.

15          (3) Development of sustainable energy alter-  
16      natives in the countries of the Western Hemisphere  
17      can improve energy security, balance of trade, and  
18      environmental quality and provide markets for en-  
19      ergy technology and agricultural products. Brazil  
20      and the United States have led the world in the pro-  
21      duction of ethanol, and deeper cooperation on  
22      biofuels with other countries of the hemisphere  
23      would extend economic and security benefits.

1           (4) Private sector partnership and investment  
2           in all sources of energy is critical to providing en-  
3           ergy security in the Western Hemisphere.

4           (b) HEMISPHERE ENERGY COOPERATION FORUM.—

5           (1) ESTABLISHMENT.—The Secretary of State,  
6           in coordination with the Secretary of Energy, should  
7           immediately seek to establish a regional-based min-  
8           isterial forum to be known as the Hemisphere En-  
9           ergy Cooperation Forum.

10          (2) PURPOSES.—The Hemisphere Energy Co-  
11          operation Forum should seek—

12                (A) to strengthen relationships between the  
13                United States and other countries of the West-  
14                ern Hemisphere through cooperation on energy  
15                issues;

16                (B) to enhance cooperation between major  
17                energy producers and major energy consumers  
18                in the Western Hemisphere, particularly among  
19                the governments of Brazil, Canada, Mexico, the  
20                United States, and Venezuela;

21                (C) to ensure that energy contributes to  
22                the economic, social, and environmental en-  
23                hancement of the countries of the Western  
24                Hemisphere;

1 (D) to provide an opportunity for open dia-  
2 logue and joint commitments between member  
3 governments and with private industry; and

4 (E) to provide participating countries the  
5 flexibility necessary to cooperatively address  
6 broad challenges posed to the energy supply of  
7 the Western Hemisphere that are practical in  
8 policy terms and politically acceptable.

9 (3) ACTIVITIES.—The Hemisphere Energy Co-  
10 operation Forum should implement the following ac-  
11 tivities:

12 (A) An Energy Crisis Initiative that will  
13 establish measures to respond to temporary en-  
14 ergy supply disruptions, including through—

15 (i) strengthening sea-lane and infra-  
16 structure security;

17 (ii) implementing a real-time emer-  
18 gency information sharing system;

19 (iii) encouraging members to have  
20 emergency mechanisms and contingency  
21 plans in place; and

22 (iv) establishing a Western Hemi-  
23 sphere energy crisis response mechanism  
24 as authorized under section 605(c).

1 (B) An Energy Sustainability Initiative to  
2 facilitate long-term supply security through fos-  
3 tering reliable supply sources of fuels, including  
4 development, deployment, and commercializa-  
5 tion of technologies for sustainable renewable  
6 fuels within the region, including activities  
7 that—

8 (i) promote production and trade in  
9 sustainable energy, including energy from  
10 biomass;

11 (ii) facilitate investment, trade, and  
12 technology cooperation in energy infra-  
13 structure, petroleum products, natural gas  
14 (including liquefied natural gas), energy ef-  
15 ficiency (including automotive efficiency),  
16 clean fossil energy, renewable energy, and  
17 carbon sequestration;

18 (iii) promote regional infrastructure  
19 and market integration;

20 (iv) develop effective and stable regu-  
21 latory frameworks;

22 (v) develop renewable fuels standards  
23 and renewable portfolio standards;



1 (vi) establish educational training and  
2 exchange programs between member coun-  
3 tries; and

4 (vii) identify and remove barriers to  
5 trade in technology, services, and commod-  
6 ities.

7 (C) An Energy for Development Initiative  
8 to promote energy access for underdeveloped  
9 areas through energy policy and infrastructure  
10 development, including activities that—

11 (i) increase access to energy services  
12 for the poor;

13 (ii) improve energy sector market con-  
14 ditions;

15 (iii) promote rural development  
16 though biomass energy production and use;

17 (iv) increase transparency of, and par-  
18 ticipation in, energy infrastructure  
19 projects;

20 (v) promote development and deploy-  
21 ment of technology for clean and sustain-  
22 able energy development, including biofuel  
23 and clean coal technologies; and

24 (vi) facilitate use of carbon sequestra-  
25 tion methods in agriculture and forestry

1                   and linking greenhouse gas emissions re-  
2                   duction programs to international carbon  
3                   markets.

4           (c) HEMISPHERE ENERGY INDUSTRY GROUP.—

5               (1) AUTHORITY.—The Secretary of State, in  
6               coordination with the Secretary of Commerce and  
7               the Secretary of Energy, should approach the gov-  
8               ernments of other countries in the Western Hemi-  
9               sphere to seek cooperation in establishing a Hemi-  
10              sphere Energy Industry Group, to be coordinated by  
11              the United States Government, involving industry  
12              representatives and government representatives from  
13              the Western Hemisphere.

14             (2) PURPOSE.—The purpose of the forum  
15             should be to increase public-private partnerships,  
16             foster private investment, and enable countries of  
17             the Western Hemisphere to devise energy agendas  
18             compatible with industry capacity and cognizant of  
19             industry goals.

20             (3) TOPICS OF DIALOGUES.—Topics for the  
21             forum should include—

22               (A) promotion of a secure investment cli-  
23               mate;

24               (B) development and deployment of  
25               biofuels and other alternative fuels and clean

1 electrical production facilities, including clean  
2 coal and carbon sequestration;

3 (C) development and deployment of energy  
4 efficient technologies and practices, including in  
5 the industrial, residential, and transportation  
6 sectors;

7 (D) investment in oil and natural gas pro-  
8 duction and distribution;

9 (E) transparency of energy production and  
10 reserves data;

11 (F) research promotion; and

12 (G) training and education exchange pro-  
13 grams.

14 (d) ANNUAL REPORT.—The Secretary of State, in co-  
15 ordination with the Secretary of Energy, shall submit to  
16 the appropriate congressional committees an annual re-  
17 port on the implementation of this section, including the  
18 strategy and benchmarks for measurement of progress de-  
19 veloped under this section.

20 **SEC. 607. NATIONAL SECURITY COUNCIL REORGANIZA-**  
21 **TION.**

22 Section 101(a) of the National Security Act of 1947  
23 (50 U.S.C. 402(a)) is amended—

24 (1) by redesignating paragraphs (5), (6), and  
25 (7) as paragraphs (6), (7), and (8), respectively; and

1           (2) by inserting after paragraph (4) the fol-  
2       lowing:

3           “(5) the Secretary of Energy;”.

4       **SEC. 608. ANNUAL NATIONAL ENERGY SECURITY STRATEGY**  
5               **REPORT.**

6       (a) REPORTS.—

7           (1) IN GENERAL.—Subject to paragraph (2), on  
8       the date on which the President submits to Congress  
9       the budget for the following fiscal year under section  
10      1105 of title 31, United States Code, the President  
11      shall submit to Congress a comprehensive report on  
12      the national energy security of the United States.

13          (2) NEW PRESIDENTS.—In addition to the re-  
14      ports required under paragraph (1), the President  
15      shall submit a comprehensive report on the national  
16      energy security of the United States by not later  
17      than 150 days after the date on which the President  
18      assumes the office of President after a presidential  
19      election.

20      (b) CONTENTS.—Each report under this section shall  
21      describe the national energy security strategy of the  
22      United States, including a comprehensive description of—

23          (1) the worldwide interests, goals, and objec-  
24      tives of the United States that are vital to the na-  
25      tional energy security of the United States;

1           (2) the foreign policy, worldwide commitments,  
2           and national defense capabilities of the United  
3           States necessary—

4                   (A) to deter political manipulation of world  
5                   energy resources; and

6                   (B) to implement the national energy secu-  
7                   rity strategy of the United States;

8           (3) the proposed short-term and long-term uses  
9           of the political, economic, military, and other au-  
10          thorities of the United States—

11                   (A) to protect or promote energy security;  
12                   and

13                   (B) to achieve the goals and objectives de-  
14                   scribed in paragraph (1);

15          (4) the adequacy of the capabilities of the  
16          United States to protect the national energy security  
17          of the United States, including an evaluation of the  
18          balance among the capabilities of all elements of the  
19          national authority of the United States to support  
20          the implementation of the national energy security  
21          strategy; and

22          (5) such other information as the President de-  
23          termines to be necessary to inform Congress on mat-  
24          ters relating to the national energy security of the  
25          United States.

1 (c) CLASSIFIED AND UNCLASSIFIED FORM.—Each  
2 national energy security strategy report shall be submitted  
3 to Congress in—

4 (1) a classified form; and

5 (2) an unclassified form.

6 **SEC. 609. APPROPRIATE CONGRESSIONAL COMMITTEES**

7 **DEFINED.**

8 In this title, the term “appropriate congressional  
9 committees” means the Committee on Foreign Relations  
10 and the Committee on Energy and Natural Resources of  
11 the Senate and the Committee on Foreign Affairs and the  
12 Committee on Energy and Commerce of the House of  
13 Representatives.

14 **SEC. 610. CONVENTION ON SUPPLEMENTARY COMPENSA-**

15 **TION FOR NUCLEAR DAMAGE CONTINGENT**

16 **COST ALLOCATION.**

17 (a) FINDINGS AND PURPOSE.—

18 (1) FINDINGS.—Congress finds that—

19 (A) section 170 of the Atomic Energy Act  
20 of 1954 (42 U.S.C. 2210) (commonly known as  
21 the “Price-Anderson Act”)—

22 (i) provides a predictable legal frame-  
23 work necessary for nuclear projects; and

1 (ii) ensures prompt and equitable  
2 compensation in the event of a nuclear in-  
3 cident in the United States;

4 (B) section 170 of that Act, in effect, pro-  
5 vides operators of nuclear powerplants with in-  
6 surance for damage arising out of a nuclear in-  
7 cident and funds the insurance primarily  
8 through the assessment of a retrospective pre-  
9 mium from each operator after the occurrence  
10 of a nuclear incident;

11 (C) the Convention on Supplementary  
12 Compensation for Nuclear Damage, done at Vi-  
13 enna on September 12, 1997, will establish a  
14 global system—

15 (i) to provide a predictable legal  
16 framework necessary for nuclear energy  
17 projects; and

18 (ii) to ensure prompt and equitable  
19 compensation in the event of a nuclear in-  
20 cident;

21 (D) the Convention benefits United States  
22 nuclear suppliers that face potentially unlimited  
23 liability for a nuclear incidents outside the cov-  
24 erage of section 170 of the Atomic Energy Act  
25 of 1954 (42 U.S.C. 2210) by replacing a poten-

1           tially open-ended liability with a predictable li-  
2           ability regime that, in effect, provides nuclear  
3           suppliers with insurance for damage arising out  
4           of such an incident;

5           (E) the Convention also benefits United  
6           States nuclear facility operators that may be  
7           publicly liable for a Price-Anderson incident by  
8           providing an additional early source for a Price-  
9           Anderson incident by providing an additional  
10          early source of funds to compensate damage  
11          arising out of the Price-Anderson incident;

12          (F) the combined operation of the Conven-  
13          tion, section 170 of the Atomic Energy Act of  
14          1954 (42 U.S.C. 2210), and this section will  
15          augment the quantity of assured funds available  
16          for victims in a wider variety of nuclear inci-  
17          dents while reducing the potential liability of  
18          United States suppliers without increasing po-  
19          tential costs to United States operators;

20          (G) the cost of those benefits is the obliga-  
21          tion of the United States to contribute to the  
22          supplementary compensation fund established  
23          by the Convention;

24          (H) any such contribution should be fund-  
25          ed in a manner that neither upsets settled ex-



1           pectations based on the liability regime estab-  
2           lished under section 170 of the Atomic Energy  
3           Act of 1954 (42 U.S.C. 2210) nor shifts to  
4           Federal taxpayers liability risks for nuclear in-  
5           cidents at foreign installations;

6           (I) with respect to a Price-Anderson inci-  
7           dent, funds already available under section 170  
8           of the Atomic Energy Act of 1954 (42 U.S.C.  
9           2210) should be used; and

10          (J) with respect to a nuclear incident out-  
11          side the United States not covered by section  
12          170 of the Atomic Energy Act of 1954 (42  
13          U.S.C. 2210), a retrospective premium should  
14          be prorated among nuclear suppliers relieved  
15          from potential liability for which insurance is  
16          not available.

17          (2) PURPOSE.—The purpose of this section is  
18          to allocate the contingent costs associated with par-  
19          ticipation by the United States in the international  
20          nuclear liability compensation system established by  
21          the Convention on Supplementary Compensation for  
22          Nuclear Damage, done at Vienna on September 12,  
23          1997—

24          (A) with respect to a Price-Anderson inci-  
25          dent, by using funds made available under sec-

1           tion 170 of the Atomic Energy Act of 1954 (42  
2           U.S.C. 2210) to cover the contingent costs in a  
3           manner that neither increases the burdens nor  
4           decreases the benefits under section 170 of that  
5           Act; and

6                   (B) with respect to a covered incident out-  
7           side the United States that is not a Price-An-  
8           derson incident, by allocating the contingent  
9           costs equitably, on the basis of risk, among the  
10          class of nuclear suppliers relieved by the Con-  
11          vention from the risk of potential liability re-  
12          sulting from any covered incident outside the  
13          United States.

14       (b) DEFINITIONS.—In this section:

15           (1) COMMISSION.—The term “Commission”  
16       means the Nuclear Regulatory Commission.

17           (2) CONTINGENT COST.—The term “contingent  
18       cost” means the cost to the United States in the  
19       event of a covered incident the amount of which is  
20       equal to the amount of funds the United States is  
21       obligated to make available under paragraph 1(b) of  
22       Article III of the Convention.

23           (3) CONVENTION.—The term “Convention”  
24       means the Convention on Supplementary Compensa-

1       tion for Nuclear Damage, done at Vienna on Sep-  
2       tember 12, 1997.

3           (4) COVERED INCIDENT.—The term “covered  
4       incident” means a nuclear incident the occurrence of  
5       which results in a request for funds pursuant to Ar-  
6       ticle VII of the Convention.

7           (5) COVERED INSTALLATION.—The term “cov-  
8       ered installation” means a nuclear installation at  
9       which the occurrence of a nuclear incident could re-  
10      sult in a request for funds under Article VII of the  
11      Convention.

12          (6) COVERED PERSON.—

13           (A) IN GENERAL.—The term “covered per-  
14      son” means—

15                   (i) a United States person; and

16                   (ii) an individual or entity (including  
17                   an agency or instrumentality of a foreign  
18                   country) that—

19                           (I) is located in the United  
20                           States; or

21                           (II) carries out an activity in the  
22                           United States.

23           (B) EXCLUSIONS.—The term “covered per-  
24      son” does not include—

25                   (i) the United States; or

1 (ii) any agency or instrumentality of  
2 the United States.

3 (7) NUCLEAR SUPPLIER.—The term “nuclear  
4 supplier” means a covered person (or a successor in  
5 interest of a covered person) that—

6 (A) supplies facilities, equipment, fuel,  
7 services, or technology pertaining to the design,  
8 construction, operation, or decommissioning of  
9 a covered installation; or

10 (B) transports nuclear materials that could  
11 result in a covered incident.

12 (8) PRICE-ANDERSON INCIDENT.—The term  
13 “Price-Anderson incident” means a covered incident  
14 for which section 170 of the Atomic Energy Act of  
15 1954 (42 U.S.C. 2210) would make funds available  
16 to compensate for public liability (as defined in sec-  
17 tion 11 of that Act (42 U.S.C. 2014)).

18 (9) SECRETARY.—The term “Secretary” means  
19 the Secretary of Energy.

20 (10) UNITED STATES.—

21 (A) IN GENERAL.—The term “United  
22 States” has the meaning given the term in sec-  
23 tion 11 of the Atomic Energy Act of 1954 (42  
24 U.S.C. 2014).

1 (B) INCLUSIONS.—The term “United  
2 States” includes—

3 (i) the Commonwealth of Puerto Rico;

4 (ii) any other territory or possession  
5 of the United States;

6 (iii) the Canal Zone; and

7 (iv) the waters of the United States  
8 territorial sea under Presidential Procla-  
9 mation Number 5928, dated December 27,  
10 1988 (43 U.S.C. 1331 note).

11 (11) UNITED STATES PERSON.—The term  
12 “United States person” means—

13 (A) any individual who is a resident, na-  
14 tional, or citizen of the United States (other  
15 than an individual residing outside of the  
16 United States and employed by a person who is  
17 not a United States person); and

18 (B) any corporation, partnership, associa-  
19 tion, joint stock company, business trust, unin-  
20 corporated organization, or sole proprietorship  
21 that is organized under the laws of the United  
22 States.

23 (c) USE OF PRICE-ANDERSON FUNDS.—

24 (1) IN GENERAL.—Funds made available under  
25 section 170 of the Atomic Energy Act of 1954 (42

1 U.S.C. 2210) shall be used to cover the contingent  
2 cost resulting from any Price-Anderson incident.

3 (2) EFFECT.—The use of funds pursuant to  
4 paragraph (1) shall not reduce the limitation on  
5 public liability established under section 170 e. of  
6 the Atomic Energy Act of 1954 (42 U.S.C.  
7 2210(e)).

8 (d) EFFECT ON AMOUNT OF PUBLIC LIABILITY.—

9 (1) IN GENERAL.—Funds made available to the  
10 United States under Article VII of the Convention  
11 with respect to a Price-Anderson incident shall be  
12 used to satisfy public liability resulting from the  
13 Price-Anderson incident.

14 (2) AMOUNT.—The amount of public liability  
15 allowable under section 170 of the Atomic Energy  
16 Act of 1954 (42 U.S.C. 2210) relating to a Price-  
17 Anderson incident under paragraph (1) shall be in-  
18 creased by an amount equal to the difference  
19 between—

20 (A) the amount of funds made available  
21 for the Price-Anderson incident under Article  
22 VII of the Convention; and

23 (B) the amount of funds used under sub-  
24 section (c) to cover the contingent cost resulting  
25 from the Price-Anderson incident.

1 (e) RETROSPECTIVE RISK POOLING PROGRAM.—

2 (1) IN GENERAL.—Except as provided in para-  
3 graph (2), each nuclear supplier shall participate in  
4 a retrospective risk pooling program in accordance  
5 with this section to cover the contingent cost result-  
6 ing from a covered incident outside the United  
7 States that is not a Price-Anderson incident.

8 (2) DEFERRED PAYMENT.—

9 (A) IN GENERAL.—The obligation of a nu-  
10 clear supplier to participate in the retrospective  
11 risk pooling program shall be deferred until the  
12 United States is called on to provide funds pur-  
13 suant to Article VII of the Convention with re-  
14 spect to a covered incident that is not a Price-  
15 Anderson incident.

16 (B) AMOUNT OF DEFERRED PAYMENT.—  
17 The amount of a deferred payment of a nuclear  
18 supplier under subparagraph (A) shall be based  
19 on the risk-informed assessment formula deter-  
20 mined under subparagraph (C).

21 (C) RISK-INFORMED ASSESSMENT FOR-  
22 MULA.—

23 (i) IN GENERAL.—Not later than 3  
24 years after the date of enactment of this  
25 Act, and every 5 years thereafter, the Sec-

1           retary shall, by regulation, determine the  
2           risk-informed assessment formula for the  
3           allocation among nuclear suppliers of the  
4           contingent cost resulting from a covered  
5           incident that is not a Price-Anderson inci-  
6           dent, taking into account risk factors such  
7           as—

8                   (I) the nature and intended pur-  
9                   pose of the goods and services sup-  
10                  plied by each nuclear supplier to each  
11                  covered installation outside the United  
12                  States;

13                  (II) the quantity of the goods  
14                  and services supplied by each nuclear  
15                  supplier to each covered installation  
16                  outside the United States;

17                  (III) the hazards associated with  
18                  the supplied goods and services if the  
19                  goods and services fail to achieve the  
20                  intended purposes;

21                  (IV) the hazards associated with  
22                  the covered installation outside the  
23                  United States to which the goods and  
24                  services are supplied;



1 (V) the legal, regulatory, and fi-  
2 nancial infrastructure associated with  
3 the covered installation outside the  
4 United States to which the goods and  
5 services are supplied; and

6 (VI) the hazards associated with  
7 particular forms of transportation.

8 (ii) FACTORS FOR CONSIDERATION.—

9 In determining the formula, the Secretary  
10 may—

11 (I) exclude—

12 (aa) goods and services with  
13 negligible risk;

14 (bb) classes of goods and  
15 services not intended specifically  
16 for use in a nuclear installation;

17 (cc) a nuclear supplier with  
18 a de minimis share of the contin-  
19 gent cost; and

20 (dd) a nuclear supplier no  
21 longer in existence for which  
22 there is no identifiable successor;  
23 and

24 (II) establish the period on which  
25 the risk assessment is based.

1 (iii) APPLICATION.—In applying the  
2 formula, the Secretary shall not consider  
3 any covered installation or transportation  
4 for which funds would be available under  
5 section 170 of the Atomic Energy Act of  
6 1954 (42 U.S.C. 2210).

7 (iv) REPORT.—Not later than 5 years  
8 after the date of enactment of this Act and  
9 every 5 years thereafter, the Secretary  
10 shall submit to the Committee on Environ-  
11 ment and Public Works of the Senate and  
12 the Committee on Energy and Commerce  
13 of the House of Representatives a report  
14 on whether there is a need for continuation  
15 or amendment of this section, taking into  
16 account the effects of the implementation  
17 of the Convention on the United States nu-  
18 clear industry and suppliers.

19 (f) REPORTING.—

20 (1) COLLECTION OF INFORMATION.—

21 (A) IN GENERAL.—The Secretary may col-  
22 lect information necessary for developing and  
23 implementing the formula for calculating the  
24 deferred payment of a nuclear supplier under  
25 subsection (e)(2).

1 (B) PROVISION OF INFORMATION.—Each  
2 nuclear supplier and other appropriate persons  
3 shall make available to the Secretary such in-  
4 formation, reports, records, documents, and  
5 other data as the Secretary determines, by reg-  
6 ulation, to be necessary or appropriate to de-  
7 velop and implement the formula under sub-  
8 section (e)(2)(C).

9 (2) PRIVATE INSURANCE.—The Secretary shall  
10 make available to nuclear suppliers, and insurers of  
11 nuclear suppliers, information to support the vol-  
12 untary establishment and maintenance of private in-  
13 surance against any risk for which nuclear suppliers  
14 may be required to pay deferred payments under  
15 this section.

16 (g) EFFECT ON LIABILITY.—Nothing in any other  
17 law (including regulations) limits liability for a covered in-  
18 cident to an amount equal to less than the amount pre-  
19 scribed in paragraph 1(a) of Article IV of the Convention,  
20 unless the law—

21 (1) specifically refers to this section; and

22 (2) explicitly repeals, alters, amends, modifies,  
23 impairs, displaces, or supersedes the effect of this  
24 subsection.

25 (h) PAYMENTS TO AND BY THE UNITED STATES.—

1 (1) ACTION BY NUCLEAR SUPPLIERS.—

2 (A) NOTIFICATION.—In the case of a re-  
3 quest for funds under Article VII of the Con-  
4 vention resulting from a covered incident that is  
5 not a Price-Anderson incident, the Secretary  
6 shall notify each nuclear supplier of the amount  
7 of the deferred payment required to be made by  
8 the nuclear supplier.

9 (B) PAYMENTS.—

10 (i) IN GENERAL.—Except as provided  
11 in clause (ii), not later than 60 days after  
12 receipt of a notification under subpara-  
13 graph (A), a nuclear supplier shall pay to  
14 the general fund of the Treasury the de-  
15 ferred payment of the nuclear supplier re-  
16 quired under subparagraph (A).

17 (ii) ANNUAL PAYMENTS.—A nuclear  
18 supplier may elect to prorate payment of  
19 the deferred payment required under sub-  
20 paragraph (A) in 5 equal annual payments  
21 (including interest on the unpaid balance  
22 at the prime rate prevailing at the time the  
23 first payment is due).

24 (C) VOUCHERS.—A nuclear supplier shall  
25 submit payment certification vouchers to the

1 Secretary of the Treasury in accordance with  
2 section 3325 of title 31, United States Code.

3 (2) USE OF FUNDS.—

4 (A) IN GENERAL.—Amounts paid into the  
5 Treasury under paragraph (1) shall be available  
6 to the Secretary of the Treasury, without fur-  
7 ther appropriation and without fiscal year limi-  
8 tation, for the purpose of making the contribu-  
9 tions of public funds required to be made by the  
10 United States under the Convention.

11 (B) ACTION BY SECRETARY OF TREAS-  
12 URY.—The Secretary of the Treasury shall pay  
13 the contribution required under the Convention  
14 to the court of competent jurisdiction under Ar-  
15 ticle XIII of the Convention with respect to the  
16 applicable covered incident.

17 (3) FAILURE TO PAY.—If a nuclear supplier  
18 fails to make a payment required under this sub-  
19 section, the Secretary may take appropriate action  
20 to recover from the nuclear supplier—

21 (A) the amount of the payment due from  
22 the nuclear supplier;

23 (B) any applicable interest on the pay-  
24 ment; and

1 (C) a penalty of not more than twice the  
2 amount of the deferred payment due from the  
3 nuclear supplier.

4 (i) LIMITATION ON JUDICIAL REVIEW; CAUSE OF AC-  
5 TION.—

6 (1) LIMITATION ON JUDICIAL REVIEW.—

7 (A) IN GENERAL.—In any civil action aris-  
8 ing under the Convention over which Article  
9 XIII of the Convention grants jurisdiction to  
10 the courts of the United States, any appeal or  
11 review by writ of mandamus or otherwise with  
12 respect to a nuclear incident that is not a Price-  
13 Anderson incident shall be in accordance with  
14 chapter 83 of title 28, United States Code, ex-  
15 cept that the appeal or review shall occur in the  
16 United States Court of Appeals for the District  
17 of Columbia Circuit.

18 (B) SUPREME COURT JURISDICTION.—  
19 Nothing in this paragraph affects the jurisdic-  
20 tion of the Supreme Court of the United States  
21 under chapter 81 of title 28, United States  
22 Code.

23 (2) CAUSE OF ACTION.—

24 (A) IN GENERAL.—Subject to subpara-  
25 graph (B), in any civil action arising under the

1 Convention over which Article XIII of the Con-  
2 vention grants jurisdiction to the courts of the  
3 United States, in addition to any other cause of  
4 action that may exist, an individual or entity  
5 shall have a cause of action against the oper-  
6 ator to recover for nuclear damage suffered by  
7 the individual or entity.

8 (B) REQUIREMENT.—Subparagraph (A)  
9 shall apply only if the individual or entity seeks  
10 a remedy for nuclear damage (as defined in Ar-  
11 ticle I of the Convention) that was caused by a  
12 nuclear incident (as defined in Article I of the  
13 Convention) that is not a Price-Anderson inci-  
14 dent.

15 (C) EFFECT OF PARAGRAPH.—Nothing in  
16 this paragraph limits, modifies, extinguishes, or  
17 otherwise affects any cause of action that would  
18 have existed in the absence of enactment of this  
19 paragraph.

20 (j) RIGHT OF RECOURSE.—This section does not pro-  
21 vide to an operator of a covered installation any right of  
22 recourse under the Convention.

23 (k) PROTECTION OF SENSITIVE UNITED STATES IN-  
24 FORMATION.—Nothing in the Convention or this section  
25 requires the disclosure of—

1           (1) any data that, at any time, was Restricted  
2       Data (as defined in section 11 of the Atomic Energy  
3       Act of 1954 (42 U.S.C. 2014));

4           (2) information relating to intelligence sources  
5       or methods protected by section 102A(i) of the Na-  
6       tional Security Act of 1947 (50 U.S.C. 403–1(i)); or

7           (3) national security information classified  
8       under Executive Order 12958 (50 U.S.C. 435 note;  
9       relating to classified national security information)  
10      (or a successor regulation).

11      (l) REGULATIONS.—

12           (1) IN GENERAL.—The Secretary or the Com-  
13      mission, as appropriate, may prescribe regulations to  
14      carry out section 170 of the Atomic Energy Act of  
15      1954 (42 U.S.C. 2210) and this section.

16           (2) REQUIREMENT.—Rules prescribed under  
17      this subsection shall ensure, to the maximum extent  
18      practicable, that—

19           (A) the implementation of section 170 of  
20      the Atomic Energy Act of 1954 (42 U.S.C.  
21      2210) and this section is consistent and equi-  
22      table; and

23           (B) the financial and operational burden  
24      on a Commission licensee in complying with



1 section 170 of that Act is not greater as a re-  
2 sult of the enactment of this section.

3 (3) APPLICABILITY OF PROVISION.—Section  
4 553 of title 5, United States Code, shall apply with  
5 respect to the promulgation of regulations under this  
6 subsection.

7 (4) EFFECT OF SUBSECTION.—The authority  
8 provided under this subsection is in addition to, and  
9 does not impair or otherwise affect, any other au-  
10 thority of the Secretary or the Commission to pre-  
11 scribe regulations.

12 (m) EFFECTIVE DATE.—This section takes effect on  
13 the date of enactment of this Act.

## 14 **TITLE VII—MISCELLANEOUS**

### 15 **SEC. 701. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS** 16 **ON THE DEVELOPMENT OF COMBINED HEAT** 17 **AND POWER FACILITIES.**

18 (a) STUDY.—

19 (1) IN GENERAL.—The Secretary, in consulta-  
20 tion with the States and other appropriate entities,  
21 shall conduct a study of the laws (including regula-  
22 tions) affecting the siting of privately owned electric  
23 distribution wires on and across public rights-of-way.

24 (2) REQUIREMENTS.—The study under para-  
25 graph (1) shall include—

- 1 (A) an evaluation of—
- 2 (i) the purposes of the laws; and
- 3 (ii) the effect the laws have on the de-
- 4 velopment of combined heat and power fa-
- 5 cilities;
- 6 (B) a determination of whether a change
- 7 in the laws would have any operating, reli-
- 8 ability, cost, or other impacts on electric utili-
- 9 ties and the customers of the electric utilities;
- 10 and
- 11 (C) an assessment of—
- 12 (i) whether privately owned electric
- 13 distribution wires would result in duplica-
- 14 tive facilities; and
- 15 (ii) whether duplicative facilities are
- 16 necessary or desirable.
- 17 (b) REPORT.—Not later than 1 year after the date
- 18 of enactment of this Act, the Secretary shall submit to
- 19 Congress a report that describes the results of the study
- 20 conducted under subsection (a).

Amend the title so as to read: “An Act to move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers from price gouging, to increase the energy efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the en-

ergy performance of the Federal Government, and for other purposes.”.